

Annex I - Table 1- Total DDT ($\mu\text{g/g}$ lipid weight) in wildlife species from the Baltic Sea area

Species	collection year	N	Mean	95%	S.D.	Range	Reference (Author, year)
Herring							
Muscle	1969-1970	267	46	(a) ^a		6,3-250	Jensen, 1972
Muscle	1970	24	57	(a)			Andersson, 1988
Muscle ^b	1972	370	18	(m)c	14-23		Bignert, 1998
Muscle	1978	40	6.8	(a)			Jansson, 1979
Muscle	1978-1982	15	4.6	(a)		1.7-8.9	Moilanen, 1982
Muscle	1979	25	2.3	(a)			Andersson, 1988
Muscle ^d	1980	94	1.4	(m)	1,1-1,8		Bignert, 1998
Muscle	1986	100 ^e	0.43	(a)		0.32-0.54	Haahti, 1988
Muscle ^b	1992	19	0.28	(a)		0.10-0.58	Roots, 1995
Muscle ^b	1995	370	1.1	(m)	0,84-1,4		Bignert, 1998
Muscle ^d	1995	94	0.53	(m)	0,41-0,70		Bignert, 1998
Salmon							
Muscle	1970	34	29	(a)		10-60	Jensen, 1972
Muscle	1971	14	20	(a)			Andersson, 1988
Muscle	1979	3	24	(a)		6.3-8.8	Andersson, 1988
Muscle	1988-1992	73	5.4	(a)	4,0	1.3-28	Vuorinen, 1997
Muscle	1995	31	3.4	(a)		2.5-5.2	Asplund, 1999
Egg	1995	31	1.8	(a)		1.1-2.6	Asplund, 1999
Blood	1995	31	1.0	(a)		0.6-2.0	Asplund, 1999
Guillemot							
Breast muscle	1970-1981	19 ^c	250	(a)		74-400	Andersson, 1988
Egg	1969	211	512	(m)	390-670		Bignert, 1998
Egg	1996	211	25	(m)	19-32		Bignert, 1998
Cormorant							
Breast muscle	1979	4	64	(a)			Andersson, 1988
White tailed sea eagle							
Egg	1965-1978	34	825	(a)	375	245-1900	Helander, 1982
Egg	1979	2	835	(a)			Andersson, 1988
Egg	1995-1997	5	110	(a)		70-160	Helander, 1999

Annex I - Table 1 (continued)

Species,	collection year	N	Mean	95%	S.D.	Range	Reference (Author, year)
Grey seal							
Blubber, pups	1969-1973	23	250	(g) ^f		70-979	Blomkvist, 1992
Blubber, pups	1981-1988	10	35	(g)		19-91	Blomkvist, 1992
Blubber, pups	1995-1997	13	12	(g)			Roos, 1998
Blubber, adults	1969-1972	60	300	(a)		68-970	Olsson, 1975
Blubber, adults	1976-1982	9	42	(a)		6.4-92	Perttilä, 1986
Blubber, adults	1980-1990	15	70	(a)		11-180	Blomkvist, 1992
Ringed seal							
Blubber	1969-1972	33	200	(a)		31-770	Olsson, 1975
Blubber	1976-1982	19	76	(a)		9-161	Perttilä, 1986
Blubber, adults	1980-1986	7	230	(a)		150-820	Blomkvist, 1992
Harbour seal							
Blubber, pups	1983-1989	17	23	(a)		12-60	Blomkvist, 1992

^a arithmetic, ^b spring collected, ^c median, ^d autumn collected, ^e in five pools, ^f geometric

Annex I - Table 2 - Total PCB ($\mu\text{g/g}$ lipid weight) in wildlife species from the Baltic Sea area

Species	collection year	N	M	95%	S.D.	Range	Reference (Author, year)
Herring							
Muscle	1969-1970	267	17	(a) ^a		2,4-110	Jensen, 1972
Muscle	1970	24	24	(a)			Andersson, 1988
Muscle ^b	1972	370	16	(m) ^c	12-21		Bignert, 1998
Muscle	1979	25	2.5	(a)			Andersson, 1988
Muscle	1978-1982	15	11	(a)		3,0-19,2	Moilanen, 1982
Muscle	1978	40	7.9	(a)			Jansson, 1979
Muscle ^d	1980	94	2.2	(m)	1,7-2,9		Bignert, 1998
Muscle	1986	100 ^e	0,94	(a)		0,76-1,1	Hahti, 1988
Muscle ^b	1996	370	2.4	(m)	1,8-3,2		Bignert, 1998
Muscle ^d	1996	94	1.1	(m)	0,87-1,5		Bignert, 1998
Salmon							
Muscle	1970	34	12	(a)		5,8-25	Jensen, 1972
Muscle	1971	14	8.4	(a)			Andersson, 1988
Muscle	1979	5	10	(a)			Andersson, 1988
Muscle	1988-1992	73	5.0	(a)	2,83	1,2-21	Vuorinen, 1997
Muscle	1995	31	8.0	(a)		5,2-11	Asplund, 1999
Egg	1995	31	3.8	(a)		2,4-5,0	Asplund, 1999
Blood	1995	31	4.6	(a)		2,7-7,2	Asplund, 1999
Muscle	1996	50	2.3	(m)		0,5-4,5	Atuma, 1998
Guillemot							
Breast muscle	1970-1981	19 ^e	210	(a)		100-310	Andersson, 1988
Egg	1969	211	380	(m)	330-450		Bignert, 1998
Egg	1996	211	37	(m)	32-43		Bignert, 1998
Cormorant							
Breast muscle	1979	4	130	(a)			Andersson, 1988
Breast muscle	1992	3	49	(a)	31		Bignert, 1998
White tailed sea eagle							
Egg	1979	2	775	(a)			Andersson, 1988
Egg	1965-1978	34	1100	(a)	445	260-2200	Helander, 1982
Egg	1995-1997	5	390	(a)		260-590	Helander, 1999

Annex I - Table 2 - (continued)

Species	collection year	N	Mean	95%	S.D.	Range	Reference
Grey seal							
Blubber, pups	1969-1973	23	93	(g) ^f		21-290	Blomkvist, 1992
Blubber, pups	1981-1988	10	77	(g)		32-110	Blomkvist, 1992
Blubber, pups	1995-1997	13	38	(g)			Roos, 1998
Blubber	1969-1972	60	112			20-330	Olsson, 1975
Blubber	1976-1982	9	53	(a)		26-112	Perttilä, 1986
Blubber, adults	1980-1990	15	190	(a)		57-770	Blomkvist, 1992
Ringed seal							
Blubber	1969-1972	33	110	(a)		27-390	Olsson, 1975
Blubber	1976-1982	19	76	(a)			Perttilä, 1986
Blubber, adults	1980-1986	7	210	(g)		120-770	Blomkvist, 1992
Harbour seal							
Blubber, pups	1983-1989	17	33	(a)		16-98	Blomkvist, 1992

^a arithmetic, ^b spring collected, ^c median, ^d autumn collected, ^e in five pools, ^f geometric

Annex I - Table 3 - HCB ($\mu\text{g/g}$ lipid weight) in wildlife species from the Baltic Sea area

Species	collection year	N	Mean	95% confidence	S.D.	Range	Reference (Author, year)
Herring							
Muscle	1986	100 ^a	0,016	(a) ^b		0,014-0,018	Haahti, 1988
Muscle ^c	1988	160	0,10	(m) ^d	0,078-0,13		Bignert, 1998
Muscle ^e	1988	160	0,20	(m)	0,14-0,29		Bignert, 1998
Muscle	1992	19	0,018	(a)		0,006-0,042	Roots, 1995
Muscle ^c	1995	160	0,025	(m)	0,019-0,033		Bignert, 1998
Muscle ^e	1995	160	0,067	(m)	0,049-0,092		Bignert, 1998
Salmon							
Muscle	1988-1992	73	0,17	(a)	0,066	0,068-0,36	Vuorinen, 1997
Muscle	1995	33	0,092	(a)	21	0,062-0,130	Asplund, 1999
Egg	1995	33	0,10	(a)		0,044-0,150	Asplund, 1999
Blood	1995	33	0,031	(a)		0,008-0,058	Asplund, 1999
Guillemot							
Egg	1988	80	5,7	(m)	3,6-8,9		Bignert, 1998
Egg	1995	80	1,2	(m)	0,94-1,6		Bignert, 1998
Egg	1969	10	4,4	(a)			Bignert, 1998

^a in five pools, ^b arithmetic, ^c autumn collected, ^d median, ^e spring collected

Annex I - Table 4 - α -HCH ($\mu\text{g/g}$ lipid weight) in wildlife species from the Baltic Sea area

Species	collection year	N	M	95%	Range	Reference (Author, year)
Herring						
Muscle ^a	1988	160	0.096 (m) ^b	0.076-0.12		Bignert, 1998
Muscle ^c	1988	160	0.12 (m)	0.10-0.15		Bignert, 1998
Muscle	1992	16	0.009 (a) ^d		0.0006-0.026	Roots, 1995
Muscle ^a	1995	160	0.026 (m)	0.020-0.032		Bignert, 1998
Muscle ^c	1995	160	0.028 (m)	0.024-0.028		Bignert, 1998
Salmon						
Muscle	1988-1992	73	0.011 (a)		n.d.-0,38	Vuorinen, 1997
Guillemot						
Egg	1988	80	0.095 (m)	0.060-0.15		Bignert, 1998
Egg	1995	80	0.016 (m)	0.010-0.025		Bignert, 1998

^a autumn collected, ^b median, ^c spring collected, ^d arithmetic

Annex I - Table 5 - β -HCH ($\mu\text{g/g}$ lipid weight) in wildlife species from the Baltic Sea area

Species	collection year	N	M	95%	Range	Reference (Author, year)
Herring						
Muscle ^a	1988	160	0.048(m) ^b	0.038-0.061		Bignert, 1998
Muscle ^c	1988	160	0.047 (m)	0.036-0.063		Bignert, 1998
Muscle	1992	6	0.014 (a) ^d		0.008-0.030	Roots, 1995
Muscle ^a	1995	160	0.021 (m)	0.017-0.027		Bignert, 1998
Muscle ^c	1995	160	0.021 (m)	0.017-0.027		Bignert, 1998
Guillemot						
Egg	1969	80	1.2 (m)	0.950-1.60		Bignert, 1998
Egg	1996	80	0.46 (m)	0.36-0.59		Bignert, 1998

^a autumn collected, ^b median, ^c spring collected, ^d arithmetic

Annex I - Table 6 - Lindane ($\mu\text{g/g}$ lipid weight) in wildlife species from the Baltic Sea area

Species	collection year	N	M	95%	Range	Reference (Author, year)
Herring						
Muscle	1986	100 ¹	0,015	(a) ²		
Muscle ³	1988	160	0,055	(m) ⁴	0,048-0-064	Bignert, 1998
Muscle ⁵	1988	160	0,088	(m)	0,070-0,10	Bignert, 1998
Muscle	1992	16	0,010	(a)		Roots, 1995
Muscle ³	1995	160	0,025	(m)	0,022-0-029	Bignert, 1998
Muscle ⁵	1995	160	0,024	(m)	0,020-0,030	Bignert, 1998
Salmon						
Muscle	1988-1992	73	0,012	(a)	0,013	n.d-0,075
Guillemot						
Egg	1988	80	0,064	(m)	0,029-0,14	Bignert, 1998
Egg	1995	80	0,010	(m)	0,004-0,022	Bignert, 1998

¹ in five pools, ² arithmetic, ³ autumn collected, ⁴ median, ⁵ spring collected

Annex I - Table 7 - Chlordanes ($\mu\text{g/g}$ lipid weight) in wildlife species from the Baltic Sea area

Species	collection year	N	M	S.D.	Range	Reference (Author, year)
Herring						
Muscle	1970	24	0,52	(a) ¹		Andersson, 1988
Muscle	1978-1982	15	0,48	(a)	0,21-0,83	Moilanen,, 1982
Muscle	1979	25	0,20	(a)		Andersson, 1988
Muscle	1978	40	0,6	(a)		Jansson, 1979
Salmon						
Muscle	1971	14	0,28	(a)		Andersson, 1988
Muscle	1979	3	0,34	(a)		Andersson, 1988
Muscle	1988-1992	73	0,36	(a)	0,17 0,30 – 0,39 0,18-0,99	Vuorinen, 1997
Guillemot						
Egg	1978	10	0,7	(a)		
		10	3,4	(a)		Jansson, 1979
Grey seal						
Adults	1974-1978	5	10	(a)		Jansson, 1979
Adults	1980-1990	23	16	(a)		Andersson, 1992
Pups	1980-1990	10	3,4	(a)	3,3 – 54	Andersson, 1992
Ringed seal						
Adults	1980-1986	5	11	(a)		Andersson, 1992
Harbour seal						
Pups	1983-1989	17	1,4	(a)	0,8 – 1,8	Andersson, 1992

¹ arithmetic

Annex I - Table 8 - Polychlorinated Camphenens (PCC) ($\mu\text{g/g}$ lipid weight) in wildlife species from the Baltic Sea area

Species	collection year	N	M	S.D.	Range	Reference (Author, year)
Herring						
Muscle	1979	25	3,9	(a) ¹		Andersson, 1988
Muscle	1970	24	14	(a)		Andersson, 1988
Muscle	1978	40	13	(a)		Jansson, 1979
Salmon						
Muscle	1971	14	6,5	(a)		Andersson, 1988
Muscle	1979	3	5,7	(a)		Andersson, 1988
Muscle	1988-1992	73	1,42	(a)	1,05 5,2-6,2 1,2-21	Vuorinen, 1997
Guillemot						
Egg	1974-1976	10	70	(a)		Wideqvist, 1993
Egg	1987-1989	10	26	(a)		Wideqvist, 1993
Egg	1978	10	17	(a)		Jansson, 1979
Breast muscle	1970-1981	19	6,0	(a)	4,2-7,7	Andersson, 1988
Cormorant						
Breast muscle	1975	4	1,7	(a)		Andersson, 1988
White tailed sea eagle						
Egg	1965	2	8,5	(a)		Andersson, 1988
Grey seal						
Pups	1981-1988	10	3,8	(a)		Wideqvist, 1993
Pups	1976-1978	2	5,8	(a)		Andersson, 1988
Adults	1980-1990	23	3,3	(a)	1,9-10	Wideqvist, 1993
Adult	1974-1977	5	11			Jansson, 1979
Ringed seal						
Adult males	1980-1986	5	14	(a)		Wideqvist, 1993
Adult	1981	1	12			Andersson, 1988
Harbour seal						
Pups	1983-1989	17	2,4	(a)	1,4 – 3,6	Wideqvist, 1993

¹ arithmetic

Annex I - Table 9 - PBDE(µg/g lipid weight) in wildlife species from the Baltic Sea area

Species	collection year	N	Mean	Range	Reference (Author, year)	
Herring						
Muscle, spring collected ^a	1987	60	0,530	(a) ^b	Sellström, 1991	
Muscle, autumn collected ^c	1987	10	0,047	(a)	0,017-0,055	Sellström, 1991
Salmon						
Muscle	1995	31	0,290	(a)	0,190-0,510	Asplund, 1999
Egg	1995	31	0,99	(a)	0,075-0,150	Asplund, 1999
Blood	1995	31	0,30	(a)	0,130-0,630	Asplund, 1999
Guillemot						
Guillemot, egg	1974	10	0,230	(a)	Sellström, 1991	
Guillemot, egg	1989	10	1,200	(a)	Sellström, 1991	
Grey seal						
Blubber, pups	1981-1988	10	0,30	(a)	Andersson, 1992	
Blubber, adults	1980-1990	11	0,33	(a)	Andersson, 1992	
Blubber	1979-1985	8	0,73	(a)	Sellström, 1991	
Ringed seal						
Blubber, adults	1980-1986	5	0,32	(a)	Andersson, 1992	
Harbour seal						
Blubber, pups	1983-1989	17	0,56	(a)	Andersson, 1992	

^a spring collected, ^b arithmetic, ^c autumn collected

Annex I - Table 10 - Dioxin-TEQ (pg/g lipid weight) in wildlife species from the Baltic Sea area

Species	collection year	N	Mean	Range	Reference (Author, year)
Herring, muscle					
Northern Baltic	1994, 2 year of age	10	17		de Wit, 1999
Northern Baltic	1988-1993, 2 year	20	34	31-37	de Wit, 1994
Southern Baltic	1994, 2 year	10	22		de Wit, 1999
Southern Baltic	1988-1993, 2 year	10	23		de Wit, 1994
Southern Baltic	1988-1993, 2 year	10	26		de Wit, 1994
Southern Baltic	1988-1993, 4 year	10	60		de Wit, 1994
Southern Baltic	1988-1993, 6 year	10	74		de Wit, 1994
Guillemot egg					
1969-1979		100	260	0 2130-3600	
1988-1994		70	1100	970-1300	
White tailed sea eagle					
Breast muscle			2700		de Wit, 1994
Grey seal, blubber					
Juveniles	1987	10	15		Bignert, 1989
Juveniles	1985-1990	10	23		Bergek, 1992
Adult males	1985-1990	5	14		Bergek, 1992
Adult females	1985-1990	18	17		Bergek, 1992
Ringed seal, blubber					
Juveniles	1986-1987	5	122		Bignert, 1989
Juveniles	1985-1990	10	67		Bergek, 1992
Adults	1986-1987	5	59		Bignert, 1989
Adult males	1985-1990	5	166		Bergek, 1992
Harbour seal, blubber					
Juveniles	1983-1987	9	12		Bignert, 1989
Juveniles	1985-1990	14	14		Bergek, 1992

Annex I - Table 11 - Levels of total DDT ($\mu\text{g/g}$ lipid weight) in the Great Lakes area

Species, lake	collection year	N	Mean ΣDDT	Mean DDE	S.D.	95% C.I.	Reference (Author, year)
Lake trout							
Michigan, whole body	1972	9	61.1 (a) ^a			43.5-78.8	De Vault, 1986
Michigan, whole body	1973	30	62.3 (a)			53.8-131.3	De Vault, 1986
Michigan, whole body	1977	15 ^b	38.1 (a)			-2.4-78.9	De Vault, 1986
Michigan, whole body	1978	40 ^c	26.2 (a)			13.3-39.0	De Vault, 1986
Michigan, whole body	1979	30 ^d	41.1 (a)			16.7-65.5	De Vault, 1986
Ontario, whole body	1977	48		11.8 (g) ^e			Borgmann, 1991
Ontario, whole body	1978	141		5.9 (g)			Borgmann, 1991
Ontario, whole body	1979	176		6.3 (g)			Borgmann, 1991
Ontario, whole body	1977	6		8.6 (a)	3.5		Huestis, 1996
Ontario, whole body	1978	7		4.6 (a)	1.6		Huestis, 1996
Huron, whole body	1978	6	11.4 (a)			10.6-12.1	De Vault, 1986
Huron, whole body	1979	5	13.4 (a)			9.1-17.7	De Vault, 1986
Superior, whole body	1977	7	7.3 (a)			3.1-6.6	De Vault, 1986
Superior, whole body	1979	6	5.0 (a)			2.8-7.2	De Vault, 1986
Ontario, whole body	1992	7		3.7 (a)	0.82		Huestis, 1996
Ontario, whole body	1993	7		5.5 (a)	0.98		Huestis, 1996
Herring gull							
Michigan, egg	1977			320 (a)			Tillitt, 1998
Michigan, egg	1978			240 (a)			Tillitt, 1998
Michigan, egg	1991			110 (a)			Tillitt, 1998
Michigan, egg	1992			90 (a)			Tillitt, 1998
Ontario, egg	1977			170 (a)			Tillitt, 1998
Ontario, egg	1978			120 (a)			Tillitt, 1998
Ontario, egg	1991			33 (a)			Tillitt, 1998
Ontario, egg	1992			55 (a)			Tillitt, 1998
Huron, egg	1977			170 (a)			Tillitt, 1998
Huron, egg	1978			72 (a)			Tillitt, 1998
Huron, egg	1991			28 (a)			Tillitt, 1998
Huron, egg	1992			33 (a)			Tillitt, 1998
Superior, egg	1977			130 (a)			Tillitt, 1998
Superior, egg	1978			110 (a)			Tillitt, 1998
Superior, egg	1991			39 (a)			Tillitt, 1998
Superior, egg	1992			44 (a)			Tillitt, 1998

Annex I - Table 11 - (continued)

Species, lake	collection year	N	Mean DDT	Mean DDE	S.D.	95% C.I.	Reference (Author, year)
Double-crested cormorant							
Ontario, egg	1970-72	7		271 (a)	63		Ryckman, 1998
Ontario, egg	1981	20		113 (a)	54		Ryckman, 1998
Ontario, egg	1995	30 ^f		55			Ryckman, 1998
Huron, egg	1970-72	21		258 (a)	135		Ryckman, 1998
Huron, egg	1979	9		54 (a)	62		Ryckman, 1998
Huron, egg	1995	10 ^f		43			Ryckman, 1998
Superior, egg	1983	10 ^f		52			Ryckman, 1998
Superior, egg	1995	10 ^f		57			Ryckman, 1998
Erie, egg	1970-72	18		77 (a)	56		Ryckman, 1998
Erie, egg	1979	10		109 (a)	56		Ryckman, 1998
Erie, egg	1995	10 ^f		47			Ryckman, 1998
Mink							
Erie, Mersea, liver	1988-1989	9		1.4 (a)	0.4		Haffner, 1998
Erie, Dover, liver	1988-1989	9		0.76 (a)	0.2		Haffner, 1998
Erie, Dorchester, liver	1988-1989	1		0.16 (a)			
Ontario, Darlington, liver	1988-1989	2		1.8 (a)	1.3		

^a arithmetic mean; ^b in 3 pools, ^c in eight pools, ^d in six pools, ^e geometric mean, ^f in one pool

Annex I - Table 12 - Levels of total PCBs ($\mu\text{g/g}$ lipid weight) in the Great Lakes area

Species, lake	collection year	N	Mean PCB	S.D.	95% C.I.	Reference (Author, year)
Lake trout						
Michigan, whole body	1972	9	69.5		43.8-95.2	De Vault, 1986
Michigan, whole body	1973	30	118		105.3-131.3	De Vault, 1986
Michigan, whole body	1977	15 ^a	69.8 (a) ^b		-13.9-153.0	De Vault, 1986
Michigan, whole body	1978	40 ^c	46.7 (a)		31.4-62.2	De Vault, 1986
Michigan, whole body	1979	30 ^d	52.5 (a)		30.9-74.4	De Vault, 1986
Ontario, whole body	1977	48	31.7 (g) ^e			Borgmann, 1991
Ontario, whole body	1978	141	40.9 (g)			Borgmann, 1991
Ontario, whole body	1979	176	19.5 (g)			Borgmann, 1991
Ontario, whole body	1977	6	35.3 (a)	15.6		Huestis, 1996
Ontario, whole body	1978	7	25.8 (a)	5.3		Huestis, 1996
Ontario, whole body	1992	7	11.5 (a)	1.1		Huestis, 1996
Ontario, whole body	1993	7	13.9 (a)	5.3		Huestis, 1996
Huron, whole body	1978	6	15.2 (a)		12.1-18.3	De Vault, 1986
Huron, whole body	1979	5	17.2 (a)		7.4-27.0	De Vault, 1986
Superior, whole body	1977	7	11.3 (a)		5.8-17.0	De Vault, 1986
Superior, whole body	1978	7	4.4 (a)		3.1-5.7	De Vault, 1986
Superior, whole body	1979	6	4.0 (a)		2.7-5.4	De Vault, 1986
Herring gull						
Michigan, egg	1977		1200 (a)			Tillitt, 1998
Michigan, egg	1978		1000 (a)			Tillitt, 1998
Michigan, egg	1991		340 (a)			Tillitt, 1998
Michigan, egg	1992		220 (a)			Tillitt, 1998
Ontario, egg	1977		530 (a)			Tillitt, 1998
Ontario, egg	1978		390 (a)			Tillitt, 1998
Ontario, egg	1981	9	538 (a)	98		Haffner, 1997
Ontario, egg	1991		79 (a)			Tillitt, 1998
Ontario, egg	1992		95 (a)			Tillitt, 1998
Ontario, egg	1992	10	166 (a)	29		Haffner, 1997
Huron, egg	1977		790 (a)			Tillitt, 1998
Huron, egg	1978		330 (a)			Tillitt, 1998
Huron, egg	1991		110 (a)			Tillitt, 1998
Huron, egg	1992		110 (a)			Tillitt, 1998
Superior, egg	1977		610 (a)			Tillitt, 1998
Superior, egg	1978		470 (a)			Tillitt, 1998
Superior, egg	1991		150 (a)			Tillitt, 1998
Superior, egg	1992		140 (a)			Tillitt, 1998
Erie, egg	1981	10	399 (a)	31.2		Haffner, 1997
Erie, egg	1992	10	320 (a)	37		Haffner, 1997

Annex I - Table 12 - (continued)

Species, lake	collection year	N	Mean PCB	S.D.	95% C.I.	Reference (Author, year)
Double-crested cormorant						
Ontario, egg	1970-72	7	529 (a)	234		Ryckman, 1998
Ontario, egg	1981	20	600 (a)	304		Ryckman, 1998
Ontario, egg	1981	10	281 (a)	52		Haffner, 1997
Ontario, egg	1992	10	230 (a)	48		Haffner, 1997
Ontario, egg	1995	30 ^f	121			Ryckman, 1998
Huron, egg	1970-72	9	393 (a)	167		Ryckman, 1998
Huron, egg	1995	10 ^f	110			Ryckman, 1998
Superior, egg	1983	10 ^f	213			Ryckman, 1998
Superior, egg	1995	10 ^f	50			Ryckman, 1998
Erie, egg	1970-72	18	228 (a)	148		Ryckman, 1998
Erie, egg	1979	10	856 (a)	453		Ryckman, 1998
Erie, egg	1981	10	670 (a)	45		Haffner, 1997
Erie, egg	1992	10	409 (a)	67		Haffner, 1997
Erie, egg	1995	10 ^f	303			Ryckman, 1998
Mink						
Erie, Mersea, liver	1988-1989	9	23.3 (a)	8.5		Haffner, 1998
Erie, Dover, liver	1988-1989	9	13.8 (a)	7.3		Haffner, 1998
Erie, Dorchester, liver	1988-1989	1	14.1			
Ontario, Darlington, liver	1988-1989	2	13.0 (a)	11.3		

^a in tree pools, ^b arithmetic mean, ^c in eight pools, ^d in six pools, ^e geometric mean, ^f in one pool

Annex I - Table 13 - Total DDT buds ($\mu\text{g/g}$ lipid weight) in Arctic species

Species	Range
Arctic char muscle	0.023 - 2.75
Mustelids	0.014 - 0.98
Glaucous gull, eggs	2.84 - 18.3
Alcids, eggs	1.27 - 3.2
White-tailed sea eagle, eggs	17.5 - 70.0 (p,p'-DDE)
Ringed seal, blubber	0.19 - 4.0
Polar bear, fat	0.052 - 1.82 (p,p'-DDE)

Reference: de March, 1998

DRAFT

Annex I - Table 14 - Total PCB levels ($\mu\text{g/g}$ lipid weight) in Arctic species

Species	Range
Arctic char muscle	0.069 - 7.0
Mustelids	0.093 - 8.0
Glaucous gull, eggs	4.6 - 26.6
Alcids, eggs	3.2 - 12.0
White-tailed sea eagle, eggs	170 - 208
Ringed seal, blubber	0.27 - 4.7
Polar bear, fat	2.76 - 80.3

Reference: de March, 1998

Annex I - Table 15 - Levels of TCDD-equivalents (pg/g lipid weight) in Arctic species

Species	Range
Arctic char muscle	2.8 – 103
Mustelids	100 – 270
White-tailed sea eagle, eggs	425 – 2300
Ringed seal, blubber	2.4 – 38
Polar bear, fat	2 – 256

Reference: de March, 1998

DRAFT

Annex I - Table 16 - Total DDT and PCB levels ($\mu\text{g/g}$ lipid weight) in blubber of fish eating marine mammals and polar bears

Continent /water	Country	Locality	Species	n	Collection year	DDT	PCB	Reference (Author, year)
Europe								
	UK	The Wash	Common seal Juv.	16	1988	2.9	12.5	Hall, 1992
		S.Lough		15	1988	0.69	36	Hall, 1992
		M.Firth		26	1988	1.92	11.8	Hall, 1992
		W. Coast		16	1988	2.15	15.5	Hall, 1992
		Orkney		16	1988	1.2	10.5	Hall, 1992
	Ireland	Northern coast		44	1988	2.6	26	Mitchell, 1992
	Sweden	The Baltic	Common seal Pups	17	1980-90	28.4	58	Blomkvist, 1992
			Grey seal adults	15	1980-90	55	140	
			Ringed seal adults	7	1980-90	230	210	
	Spain	The Mediterranean	Striped dolphin	72	1987-91		300	Aguilar, 1994
North America								
	Canada	Eastern Canada	Grey seal	8	1982	3.5	16	Schröter-Kermani, 2000
		St Lawrence Estuary	Grey seal	5	1989-1996	2.4	10	Bernt, 1999
		St Lawrence Estuary	Harbour seal	17	1989-1996	5.0	26	Bernt, 1999
Arctic								
		Baffin Bay	Beluga	208	1983-89	2.8	3.8	Norstrom, 1994
			Narwhal	21	1982-83	4.9	4.5	
			Ringed seal	202	1983-88	0.51	0.60	
			Polar Bear	121	1982-84	0.40	5.4	
	Norway	Spitzbergen	Ringed seal	20	1986-90	1.49	1.68	Norstrom, 1994
		Spitzbergen	Polar bear	10	1978-89	0.92	26.2	
	Canada	NWT Canada	Ringed seal	28	1981	0.56	0.94	Addison, 1986
		Bering Sea	Fur seal	37	1981-87	3.0	1.94	Norstrom, 1994
Pacific								
	Japan	Northern Pacific	Northern fur seal	5	1986	1.7	4.0	Tanabe, 1994
		Northern North Pacific	Larga seal	4	1991	17	23	Tanabe, 1994
		Northern North Pacific	Dall's porpoise	4	1983	13	19	Tanabe, 1994
		Northern North Pacific	Stellar sea lion	4	1990	10	19	Tanabe, 1994
Africa								
		South Africa	Common Dolphin	17	1984-87	5.4	4.1	De Kock, 1994

Annex I - Table 17 - Levels of Mono-, di-, and tributyltins in Japan

Sample type	N	MBT	DBT	TBT	Σ BT	Unit	Reference (Author, year)
Seawater	7	<8.0 – 11	<4.6 - 8.1	<3.0 - 19	<15 - 27	ng/liter	Takahashi, 1999
Sediment	2				70 - 80	ng/g d.w.	Takahashi, 1999
Caprellids, whole body		11 –28	7.9 - 17	57 - 140	78 - 180	ng/g w.w.	Takahashi, 1999
Other primary consumers	13	<9.0 – 25	5.4 - 34	12 - 45	26 - 104	ng/g w.w.	Takahashi, 1999
Diverse fish species, whole body	10	<9.0 – 15	1.8 - 32	5.1 - 210	15 - 257	ng/g w.w.	Takahashi, 1999
Dall's porpoise, liver	3	50 – 120	180 - 600	110 -310	340 - 1000	ng/g w.w.	Tanabe, 1998

Annex I - Table 18: Ranges of concentrations of NPEs in the Canadian environment (total number of sites, total number of samples)

Environmental compartment	Site type		4-NP	NP1EO	NP2EO	NP3–17EO	NP1EC	NP2EC
Effluents (µg/L)	Textiles	untreated	2.68–13.33 (2,5)	37.17– 257.09 (2,5)	106.31–591. 98 (2,5)	798.42–8811. 24 (2,5)	<0.45 (1,2)	<0.45 (1,2)
		on-site secondary treatment	0.09–3.56 (2,4)	1.12–4.10 (1,2)	0.93–3.92 (1,2)	2.07–315.45 (2,3)	0.74–5.2 (2,4)	<0.45–55.1 3 (2,4)
		going to MWWTp	0.23–25.62 (9,14)	0.74–69.15 (10,14)	0.64–284.51 (10,14)	50.18–5767.6 5 (10,14)	<0.45–1.90 (5,7)	<0.45–2.80 (5,7)
	Pulp and paper	prior to 1998	<0.02–26.20 (14,33)	<0.02–3780.0 0 (13,32)	<0.02–67.84 (14,33)	–	–	–
		after 1998	<0.10–4.3 (19,19)	<0.10–6.90 (3,3)	<0.10–35.60 (3,3)	5.90–28.80 (3,3)	<1.00–10.1 3 (15,15)	<1.00–32.3 2 (15,15)
	MWWTp	primary	<0.02–62.08 (8,21)	0.07–56.13 (10,26)	0.34–36.33 (10,26)	4.81–735.20 (8,22)	1.17–11.00 (3,7)	1.01–5.20 (3,7)
		secondary	0.12–4.79 (21,54)	<0.02–43.37 (20,46)	<0.02–32.62 (20,46)	1.00–52.82 (16,36)	2.15–74.97 (14,34)	2.15–45.40 (14,34)
		tertiary	<0.02–3.20 (7,37)	0.30–26.4 (7,37)	0.25–12.45 (7,37)	0.40–18.00 (6,35)	2.15–48.58 (6,34)	2.15–59.46 (6,34)
		lagoon	0.75–2.15 (5,5)	0.34–0.90 (5,5)	0.03–0.90 (5,5)	1.00–2.10 (4,4)	2.15–2.6 (4,4)	2.15–3.00 (4,4)
	Aquatic (µg/L)	Rivers	<0.02–4.25 (25,90)	<0.02–2.30 (12,51)	<0.02–2.45 (12,51)	0.11–17.56 (3, 27)	0.44–3.17 (1,37)	0.81–4.30 (1,37)
		Lakes	<0.02–0.06 (5,5)	<0.02–5.07 (4,4)	<0.02 (4,4)	–	–	–
		Harbours	<0.02–0.98 (12,31)	<0.02–10.29 (12,26)	<0.02–10.43 (12,26)	–	–	–
Benthic (µg/g)			<0.02–72.20 (23,58)	<0.02–38.12 (6,14)	<0.02–6.02 (6,14)	0.02–0.17 (1, 4)	–	–
Soil/sludge (µg/g)			0.74–1260 (30,107)	2.90–1825.29 (28,90)	1.52–297.21 (28,90)	0.43–215 (28,90)	<0.30–8.70 (17,66)	<0.30–26.0 (17,66)

Annex I - Table 19 - Comparison of PCDD, PCDF and PCB concentrations (pg/g lipid weight) in humans

	Sweden Breast Milk 1997	Norway, Males, 40-54 blood	New Zealand Both genders, 35-49 Serum 1997 mean	Arkansas, USA 1991 mean	Canada Blood donors 1994 mean
N	20	10 median		70	30
PCDDs					
2,3,7,8-TCDD	2	3.1	2.1	2.8	2.2
1,2,3,7,8-PeCDD	4	5.6	4.9	6.6	7.6
1,2,3,4,7,8-HxCDD	ND	2.2	2.8	9.0	
1,2,3,6,7,8-HxCDD	21	14.2	20.1	70.8	69.1 ^a
1,2,3,7,8,9-HxCDD	ND	3.8	4.0	9.4	
1,2,3,4,6,7,8-HpCDD	30	34.7	38.2	124	NR
OCDD	100	470	399	971	NR
Sum of PCDDs	157	532	477	1194	NR
TEQ (PCDDs)	8.4	11.2	10.1	19.6	18.7
PCDFs					
2,3,7,8-TCDF	ND	2.9	< 0.7	3.1	NR
1,2,3,7,8-PeCDF	ND	1.6	< 0.5	1.6	NR
2,3,4,7,8-PeCDF	11	15.5	3.8	5.5	8.0
1,2,3,4,7,8-HxCDF	4	7.4	2.2	8.0	15.1 ^a
1,2,3,6,7,8-HxCDF	3	7.7	2.6	5.3	
2,3,4,6,7,8-HxCDF	ND	3.8	0.8	3.8	
1,2,3,7,8,9-HxCDF	ND	0.9	< 0.4	1.8	
1,2,3,4,6,7,8-HpCDF	5	13.3	9.7	21.3	
1,2,3,4,7,8,9-HpCDF	< 1	1.1	1.1	NA	NR
OCDF	< 4	6.1	20.3	6.9	NR
Sum of PCDFs	23	60.2	40.5	57.3	NR
TEQ (PCDFs)	6.3	10.3	2.5	4.2	5.5
Sum of PCDDs and PCDFs	14.7	21.5	12.6	23.8	24.2
Non-ortho-PCBs					
CB-77	16	NA		12.6	ND
CB-81	-	NA		8.5	NR
CB-126	76	100.7		18.4	60
CB-169	39	72.7		17.9	43
Sum of non-ortho-PCBs	131	173.4		57.4	103
TEQ (non-ortho-PCBs)	8.0	10.8		2.0	6.4

Annex I - Table 19 - (continued)

	Sweden Breast Milk 1997	Norway, Males, 40-54 blood median	New Zealand Both genders, 35-49 Serum 1997 mean	Arkansas, USA 1991 mean	Canada Blood donors 1994 mean
Mono-ortho-PCBs					
CB-105	4,000	9,200			9,800
CB-114	ND	ND			NR
CB-118	13,000	32,200			19,000
CB-123	NA				ND
CB-156	6,000	26,200			8,600
CB-157	2,000	4,400			ND
CB-167	ND				ND
CB-189					ND
Sum of mono-ortho-PCBs	25,000	72,000			37,400
TEQ (mono-ortho-PCBs)	5.7	19.4			7.2
Total TEQ	28.4	51.7			37.8

^a Reported as the sum of the hexas

Reference

Annex I - Table 20 - Maternal plasma concentrations of PCBs (geometric means, µg/kg lipid): Circumpolar study 1994-1996 (AMAP)

	Country					
	Canada (n=67)	Greenland (n=117)	Sweden (n=40)	Norway (n=60)	Iceland (n=40)	Russia (n=51)
PCBs (as Aroclor 1260)	439	1577	606	458	590	570
CB 28	1.4	2.6	2.5	2.9	4.1	3.4
CB 52	1.7	3.8	2.0	1.8	2.2	2.3
CB 99	11.5	29.1	6.4	6.7	9.5	20.8
CB 101	1.8	4.3	1.5	1.4	1.9	2.4
CB 105	2.2	7.3	1.9	2.2	3.7	8.2
CB 118	8.8	33.7	11.4	10.5	16.2	31.3
CB 128	1.1	1.5	1.0	1.3	1.3	1.5
CB 138	29.6	118	47.4	35.1	45.7	49.8
CB 153	54.7	185	69.3	53.0	67.8	59.8
CB 156	5.0	15.4	8.6	6.3	8.0	9.0
CB 170	9.7	34.4	18.6	12.1	16.4	10.0
CB 180	26.6	82.5	34.1	25.3	34.4	20.5
CB 183	2.5	12.5	5.9	3.7	5.2	3.7
CB 187	10.2	41.3	11.0	10.3	13.3	8.1
14 PCB congeners	167	571	222	173	230	231

Annex I - Table 21 - PCDD/PCDF concentrations expressed as TEQ in mothers milk from 18 countries throughout the world.
The samples were taken in 1987 and 1992/93, respectively.

Country	Area	1987/88				1992/93			
		n	TCDD/F (pg TEQ/g)	n Σ [6 PCB] (ng/g)	n	TCDD/F (pg TEQ/g)	no-PCB (pg TEQ/g)	[105+118] (pg TEQ/g)	Σ [6 PCB] (ng/g)
ALBANIA	Tirana				10	4.8	1.3	1.1	63
AUSTRIA	Tulln	51	18.6		21	10.9	9.4	3.0	303
BELGUM	Liege	21	40.2	21 609	20	27.1	1.7	3.1	306
CANADA	Maritimes	19	15.6		20	10.8	2.9	1.2	86
	Quebec	34	18.1		20	13.4	5.1	1.7	137
	Ontario	76	17.6		20	18.1	5.8	1.8	128
	Pairies	31	19.4		20	14.6	2.3	0.9	58
	British Columbia	23	23.0		20	15.7	2.5	1.0	70
	Hudson Bay				5	20.9	13.3	8.0	1361
CROATIA	Zagreb	41	11.8	41 450	13	13.5	5.2	2.7	219
CZECH REP.	Kladno				11	12.1	2.5	3.5	532
DENMARK	7 different cities	42	17.8	10 830	48	15.2	2.3	2.2	209
FINLAND	Kuopio	31	15.5	31 203	24	12.0	1.0	1.4	133
GERMANY	Berlin	40	32.0		10	16.5	9.0	2.7	375
HUNGARY	Budapest	100	9.1		20	8.5	0.8	0.8	61
NETHERLANDS	20 different regions	10	34.2	96 272	83-104	23.5 (8.4-63.1)	8.8 (2.8-21.7)	2.9 (0.8-6.9)	273 (102-606)
NORWAY	Tromsö	11	18.9	10 562	10	10.1	16.1	3.4	273
LITHUANIA	Vilnius city				12	13.3	11.6	8.9	322
PAKISTAN	Lahore				14	3.9	1.9	0.4	19
SLOVAK REP.	Michalovce				10	15.1	6.4	7.0	1015
SPAIN	Bizkaia				19	19.4	6.7	3.9	461
UKRAINE	Kiev nr.1				5	11.0	9.3	5.6	264
UNITED KINGD.	Glasgow		29.1		23	15.2	2.6	1.3	131

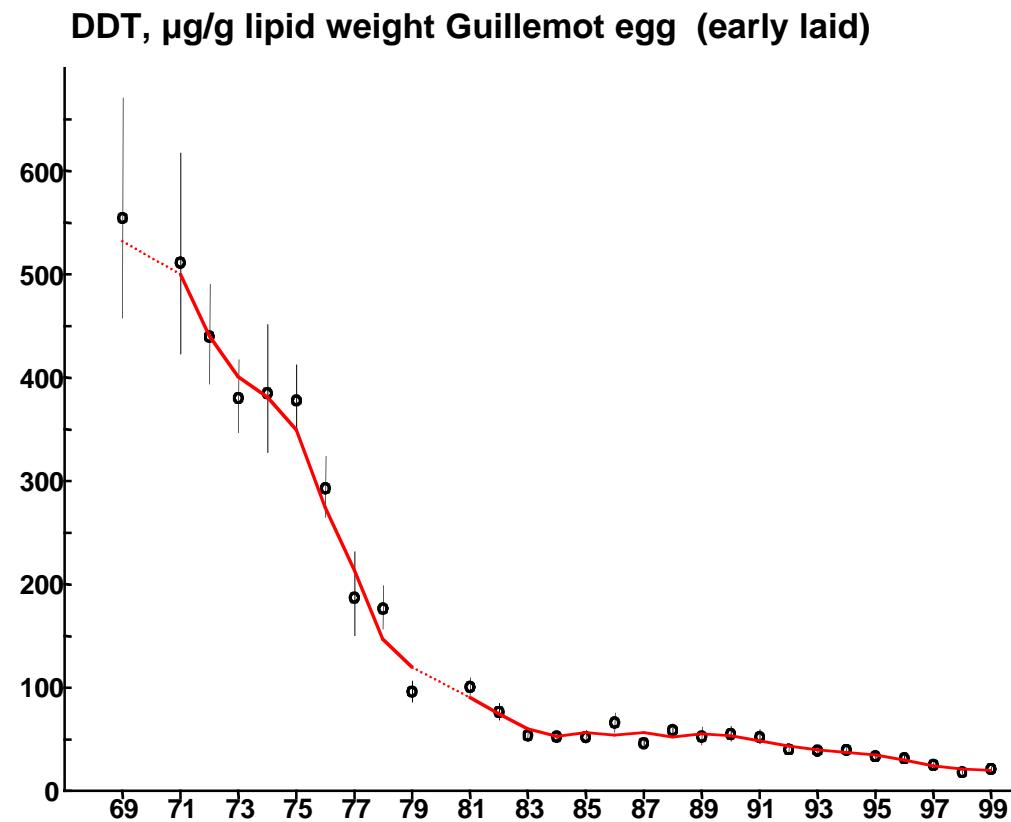
Annex I - Table 22 - Concentrations (ng/g lipid weight) of PBDEs in human milk and blood

Gender F (female) M (male)	N	Sampling year	Tissue	Geographical area	Median Mean Pool	BDE47	BDE47	PBDE	Reference (Author, year)
						ng/g lipid weight	range ng/g lipid weight		
Single samples									
F	20	1990	milk	Sweden	pool	0.81	-	1.21	Meironyté, 1999
F	40	1997	milk	Sweden	pool	2.28		4.02	Meironyté, 1999
M	4	1994	adipose	Sweden	single		1.7-4.9	3.8-7.7	Meironyté, 2001
F	10	1992	milk	Canada	median mean	1.75 3.39	0.31-18.7	3.14 5.8	Ryan, 2000 Ryan, 2000
F	200	1981/82	milk	Canada (wide)	pool			0.2	Ryan, 2000
F	100	1992	milk	Canada (wide)	pool			16.2	Ryan, 2000
F	11	1994-98	milk	Finland	median mean	0.77 1.1	0.36-2.80	2.2	Strandman, 2000 Strandman, 2000
F	8	1985	blood	Germany	median	1.8		2.6	Schröter-Kermani, 2000
M	8	1985	blood	Germany	median	2.6		3.4	Schröter-Kermani, 2000
F	10	1999	blood	Germany	median	2.8		4.3	Schröter-Kermani, 2000
M	10	1999	blood	Germany	median	3.4		5.4	Schröter-Kermani, 2000
F	20	1997	blood	Sweden	median	1.6	<1-?	3.3	Sjödin, 1999
M	20 ^a	1992	blood	Sweden	median	0.4	0.1-2.5		Sjödin, 2000
M	19 ^a	1992	blood	Latvia	median	0.26	0.1-0.72		Sjödin, 2000
M	12 ^b	1992	blood	Sweden	median	2.2	0.96-5.7		Sjödin, 2000
M	26 ^b	1992	blood	Latvia	median	2.4	1.4-5.5		Sjödin, 2000
M + F	12+12	1998	blood	Japan	median	0.5	0.1-2.0	4.0	Nagayama, 2000
F	5	1995	breast adipose	USA (Calif.)			7-28		She, 2000

Annex I - Table 23 - Comparison of PCDD/PCDF levels by age (New Zealand)

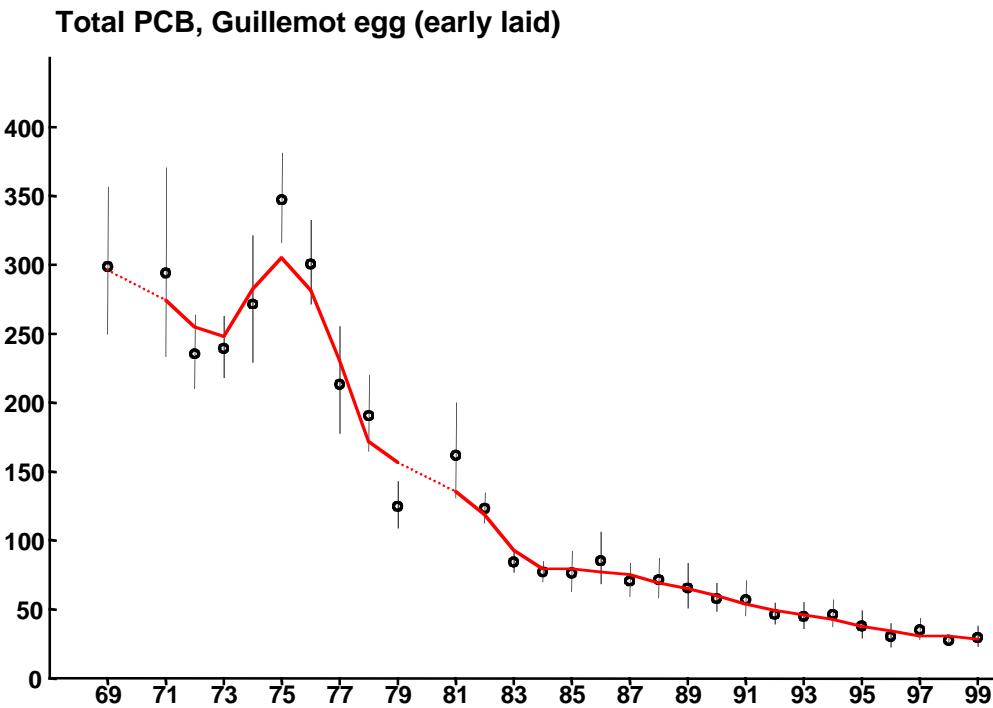
Congener	Total Population	Positives (n=60)	15-24	25-34	35-49	50-64	>65
2,3,7,8-TCDD	0.7 - 7.2	58	1.1	1.4	2.1	3.0	4.3
1,2,3,7,8-PeCDD	2.0 - 9.3	60	2.5	3.6	4.9	6.0	7.4
1,2,3,4,7,8-HxCDD	1.0 - 5.9	58	1.3	2.0	2.8	3.5	4.6
1,2,3,6,7,8-HxCDD	< 0.7 - 44.8	58	8.7	15.6	20.1	25.4	36.2
1,2,3,7,8,9-HxCDD	1.7 - 8.3	59	2.6	3.4	4.0	4.8	6.4
1,2,3,4,6,7,8-HpCDD	14.2 - 85.9	58	21.0	32.3	38.2	48.9	57.2
OCDD	143 - 961	60	203	345	399	403	506
Sum of PCDDs			240	403	471.1	494.6	622.1
TEQ (PCDDs)							
PCDFs							
2,3,7,8-PCDF	< 0.2 - 0.7	23	< 0.7	< 0.4	< 0.7	0.4	0.3
1,2,3,7,8-PeCDF	< 0.2 - 0.7	12	< 0.7	< 0.4	< 0.5	0.3	< 0.3
2,3,4,7,8-PeCDF	1.8 - 8.3	60	2.4	2.9	3.8	5.1	6.1
1,2,3,4,7,8-HxCDF	0.9 - 4.3	60	1.5	1.7	2.2	2.9	3.3
1,2,3,6,7,8-HxCDF	1.1 - 4.6	60	1.6	2.2	2.6	3.2	3.8
2,3,4,6,7,8-HxCDF	0.3 - 1.5	56	0.5	0.7	0.8	1.0	1.0
1,2,3,7,8,9-HxCDF	< 0.2 - < 2	0	< 0.6	< 0.4	< 0.4	< 0.4	< 0.3
1,2,3,4,6,7,8-HpCDF	3.6 - 21.7	30	< 20	< 30	9.7	5.0	6.3
1,2,3,4,7,8,9-HpCDF	0.2 - 1.2	29	< 1	0.5	1.1	< 2	< 0.7
OCDF	0.6 - 203	60	2.0	19.3	20.3	8.4	6.5
Sum of PCDFs			8	27.3	40.5	26.3	27.6
TEQ (PCDFs)							
Sum of PCDDs and PCDFs ^a		249	443	499	533	649	
PCDD and PCDF TEQ*		6.6	9.4	12.4	16.1	21.4	

^a Values from reference, not the same as adding the columns



Annex I – Figure 1

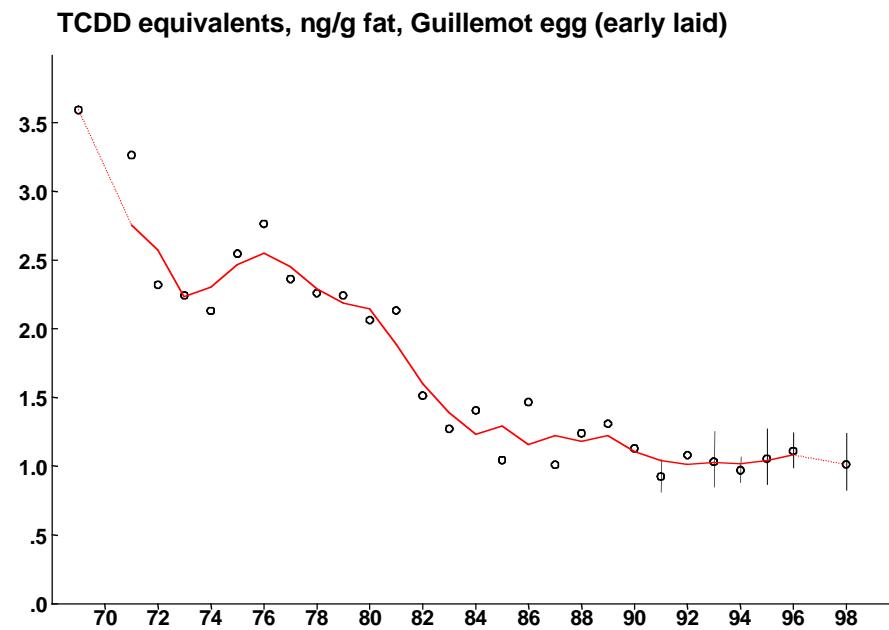
The temporal trend of total DDT (mainly DDE) in guillemot egg ($\mu\text{g/g}$ lipid weight) from the central part of the Baltic studied during 1969-1998. (Bignert *et. al.* 1998 and data from the Swedish Environmental Monitoring Programme, Swedish EPA). Circles represent geometric means and vertical lines, 95% confidence intervals.



Annex I – Figure 2

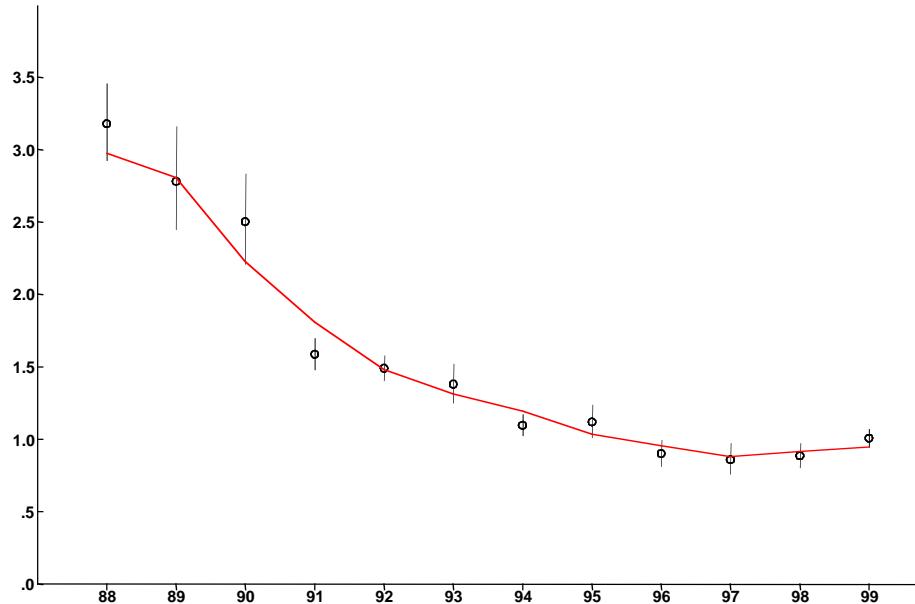
The temporal trend of total PCB in guillemot egg ($\mu\text{g/g}$ lipid weight) from the central part of the Baltic studied during 1969-1998.
(Bignert *et. al.* 1998 and data from the Swedish Environmental Monitoring Programme, Swedish EPA).
Circles represent geometric means and vertical lines 95% confidence intervals.

DRAFT



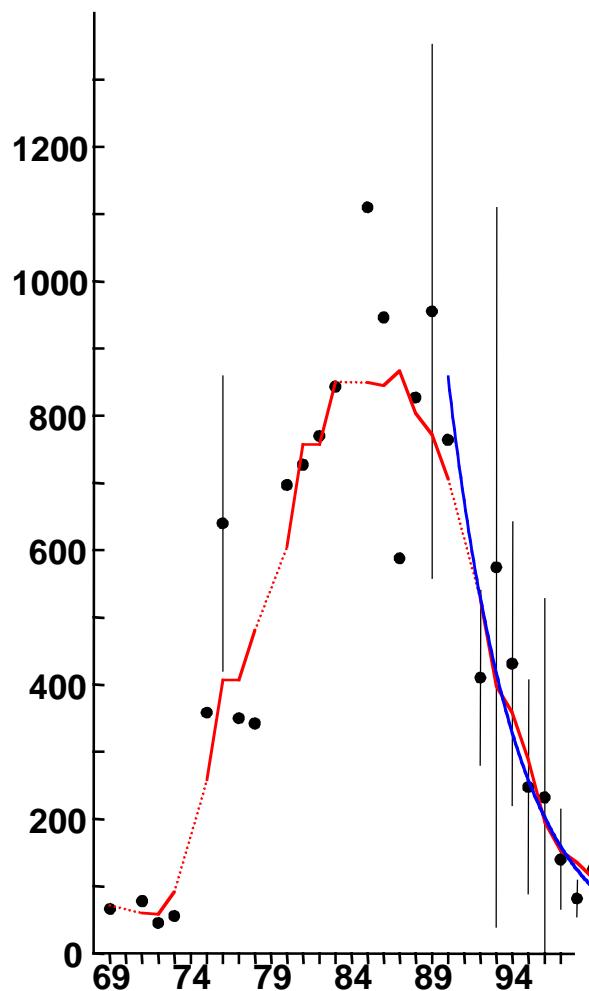
Annex I - Figure 3

The temporal trend of PCDDs/PCDFs in guillemot egg (pg/g TEQs, lipid weight) from the central part of the Baltic studied during 1969-1998. (Odsjö *et al.* 1997 and data from the Swedish Environmental Monitoring Programme, Swedish EPA). Circles represent geometric means.

HCB, guillemot egg (early laid)**Annex I - Figure 4**

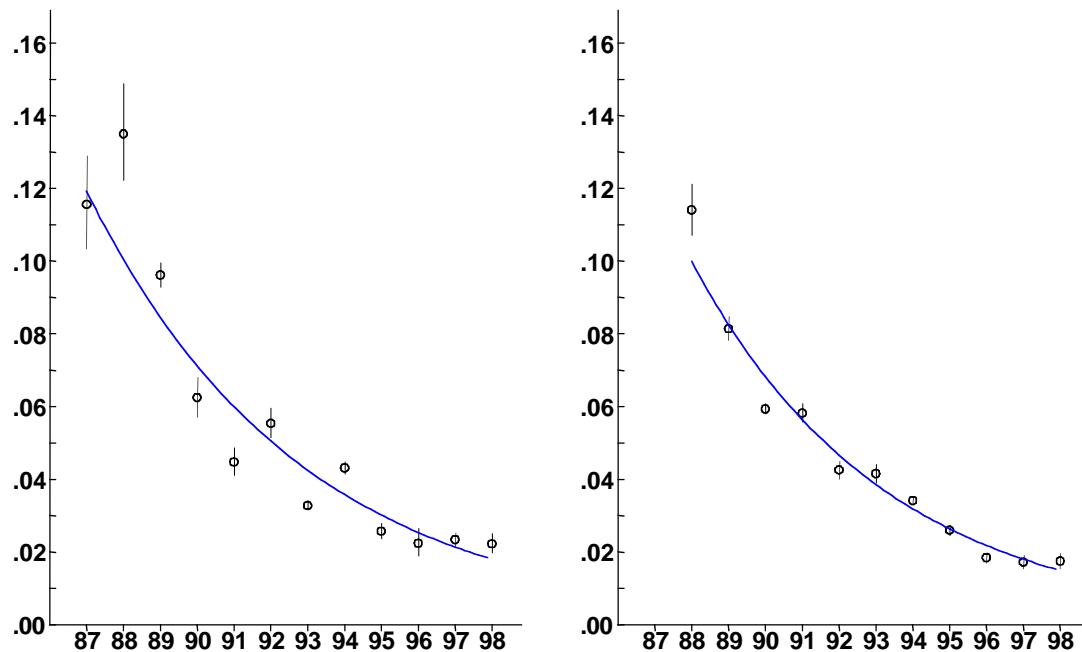
The temporal trend of HCB in guillemot egg ($\mu\text{g/g}$ lipid weight) from the central part of the Baltic studied during 1988-1998.
(Bignert *et. al.* 1998 and data from the Swedish Environmental Monitoring Programme, Swedish EPA).
Circles represent geometric means and vertical lines 95% confidence limits.

Flame Retardant BDE-47 in Guillemot eggs

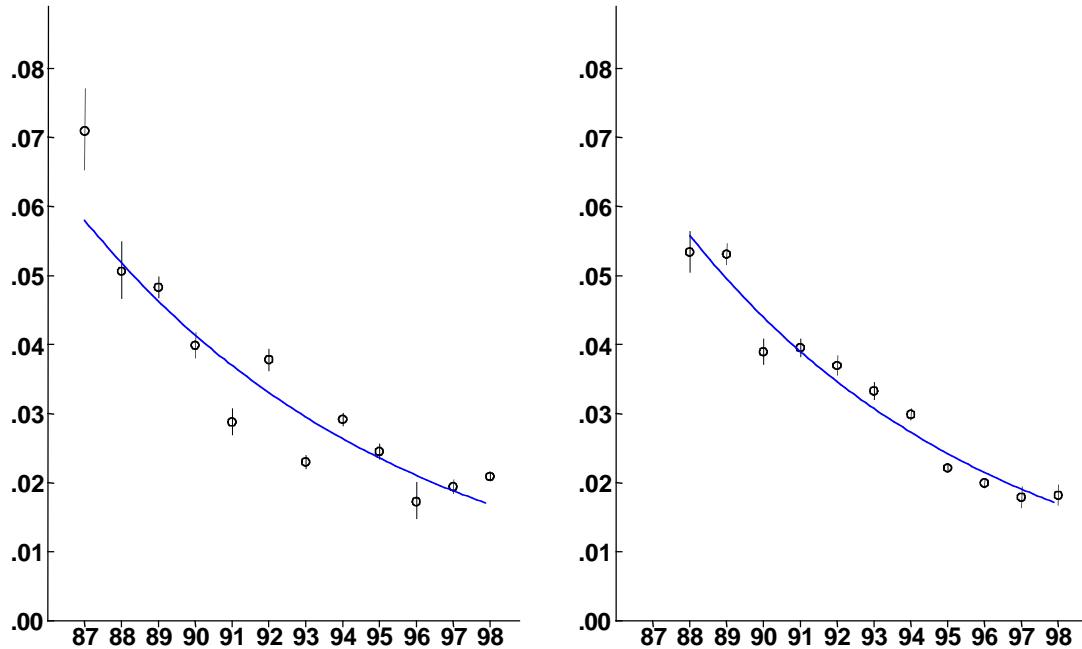


Annex I – Figure 5

The temporal trend of the flame retardant BDE-47 in guillemot eggs ($\mu\text{g}/\text{kg}$ lipid weight) from the central part of the Baltic studied during 1969-1998. (Bignert *et. al.* 1998 and data from the Swedish Environmental Monitoring Programme, Swedish EPA). Circles represent geometric means. Those without vertical lines are pooled samples. Vertical lines are 95% confidence intervals for 10 individuals.

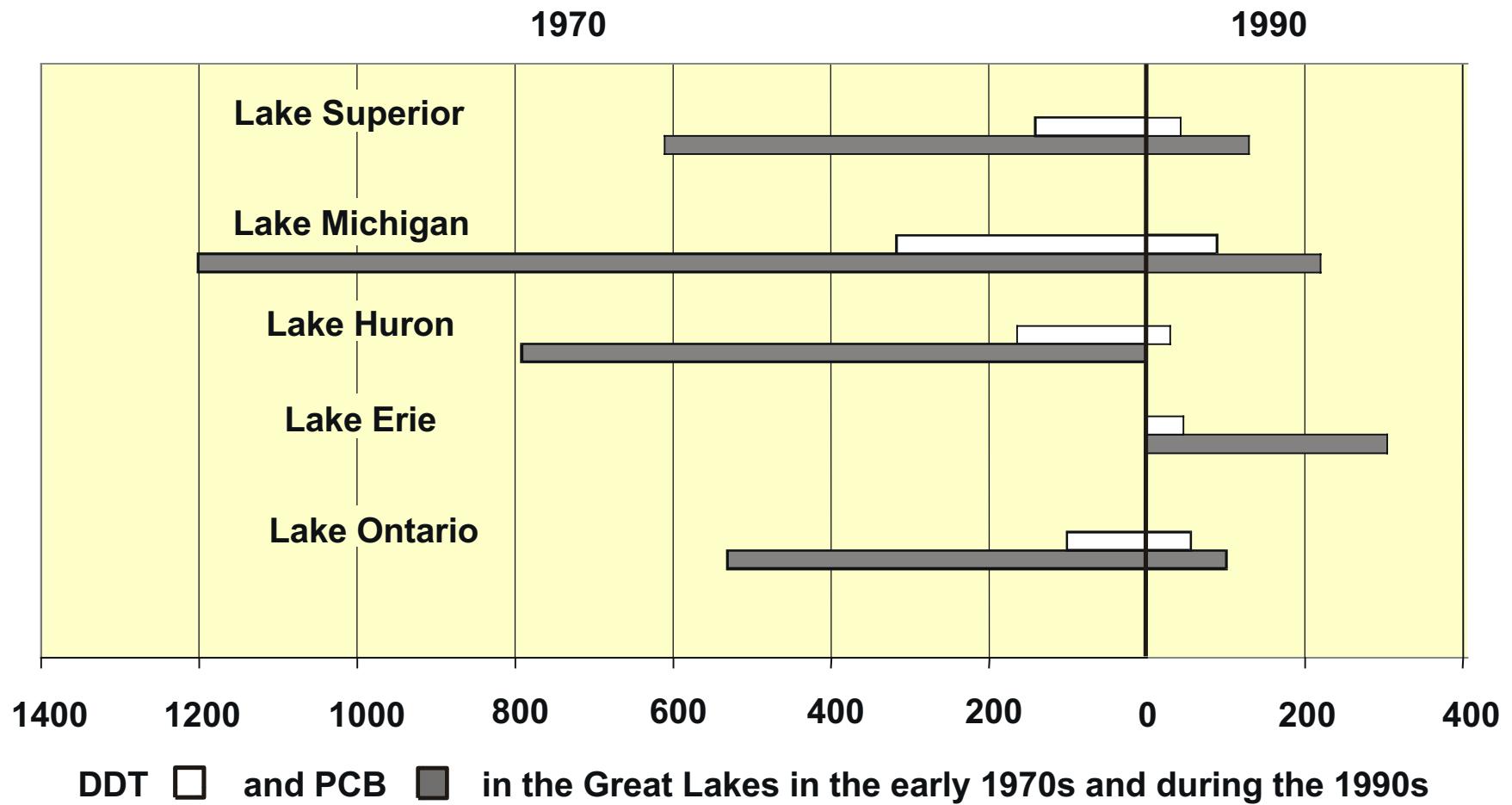
%-HCH herring muscle**Annex I – Figure 6**

The temporal trend of α -HCH in herring ($\mu\text{g/g}$ lipid weight) from the central part of the Baltic studied during 1987-1998.
(Bignert *et. al.* 1998 and data from the Swedish Environmental Monitoring Programme, Swedish EPA).
Circles represent geometric means.

Lindane herring muscle**Annex I - Figure 7**

The temporal trend of γ -HCH (lindane) in herring ($\mu\text{g/g}$ lipid weight) from the central part of the Baltic studied during 1987-1998.
(Bignert *et. al.* 1998 and data from the Swedish Environmental Monitoring Programme, Swedish EPA).
Circles represent geometric means.

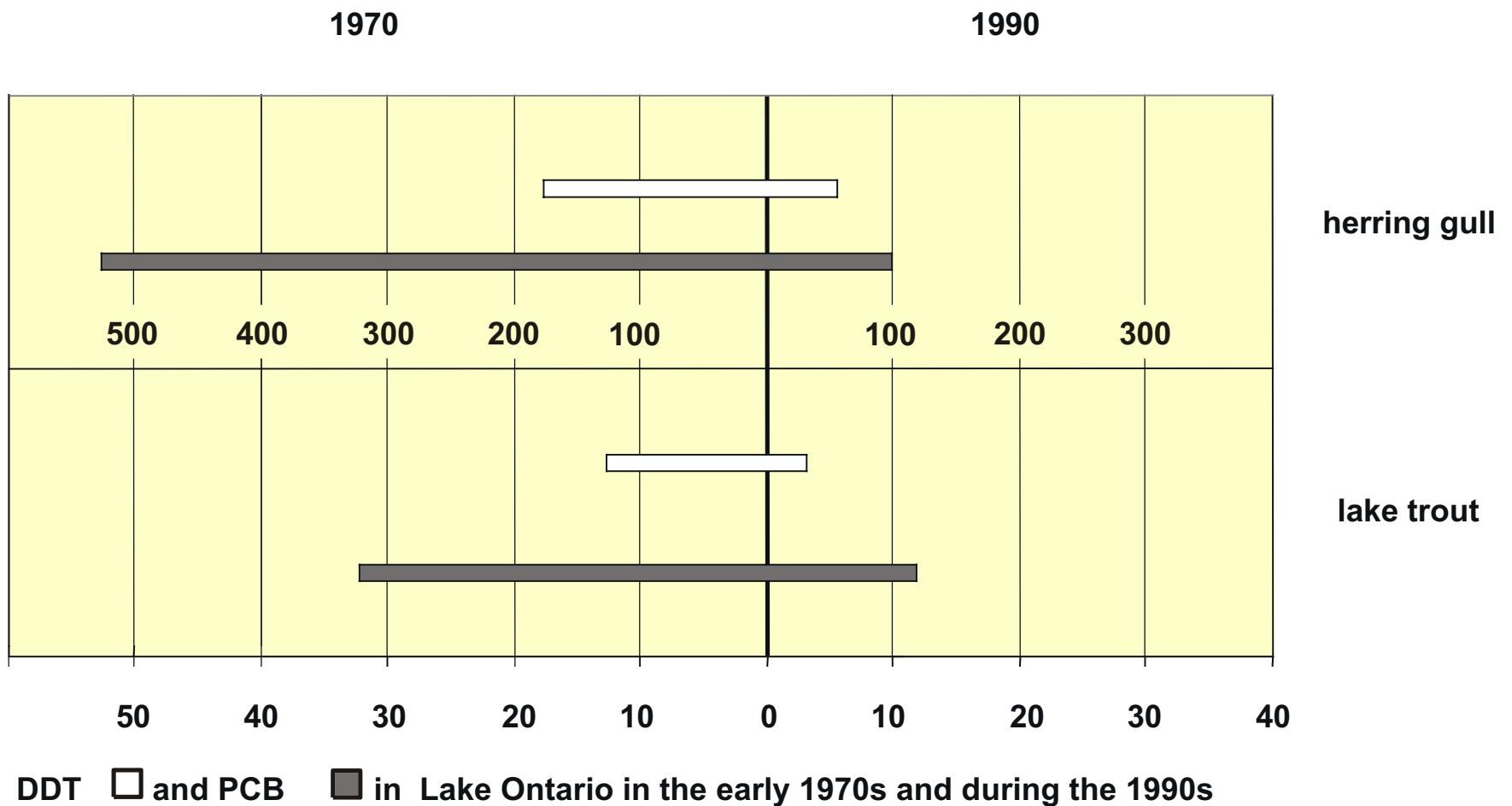
DRAFT



Annex I – Figure 8

DDT and PCB concentrations in herring gulls from the Great Lakes in the 1970s and 1990s.

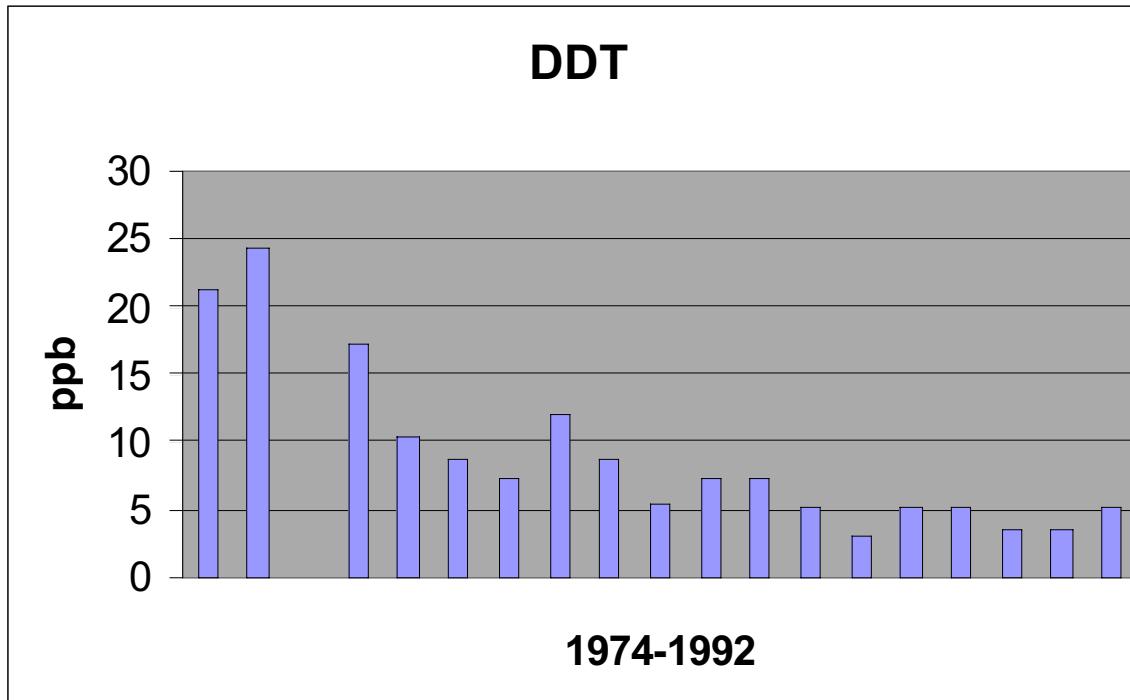
DRAFT



Annex I – Figure 9

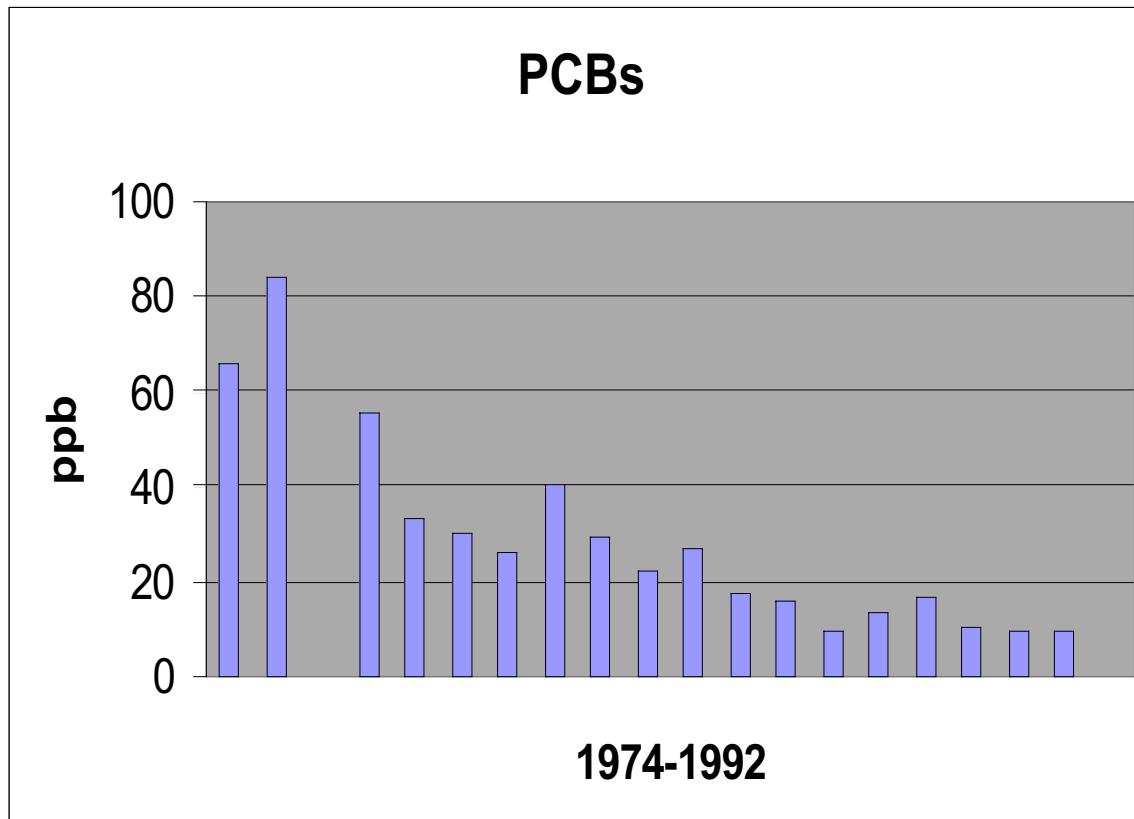
DDT and PCB concentrations in herring gull and lake trout from Lake Ontario in the 1970s and 1990s.

DRAFT



Annex I - Figure 10

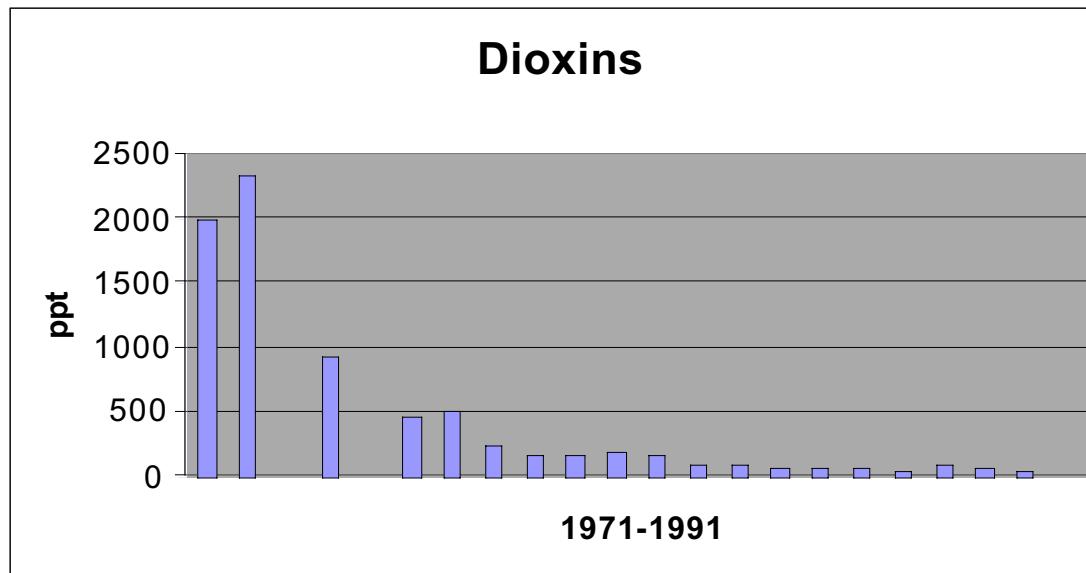
The temporal trend of concentrations of DDT compounds (ppb wet weight) in egg of herring gull from Lake Ontario, Canada, during 1974-1992. (Tillit et al. 1998)



Annex I – Figure 11

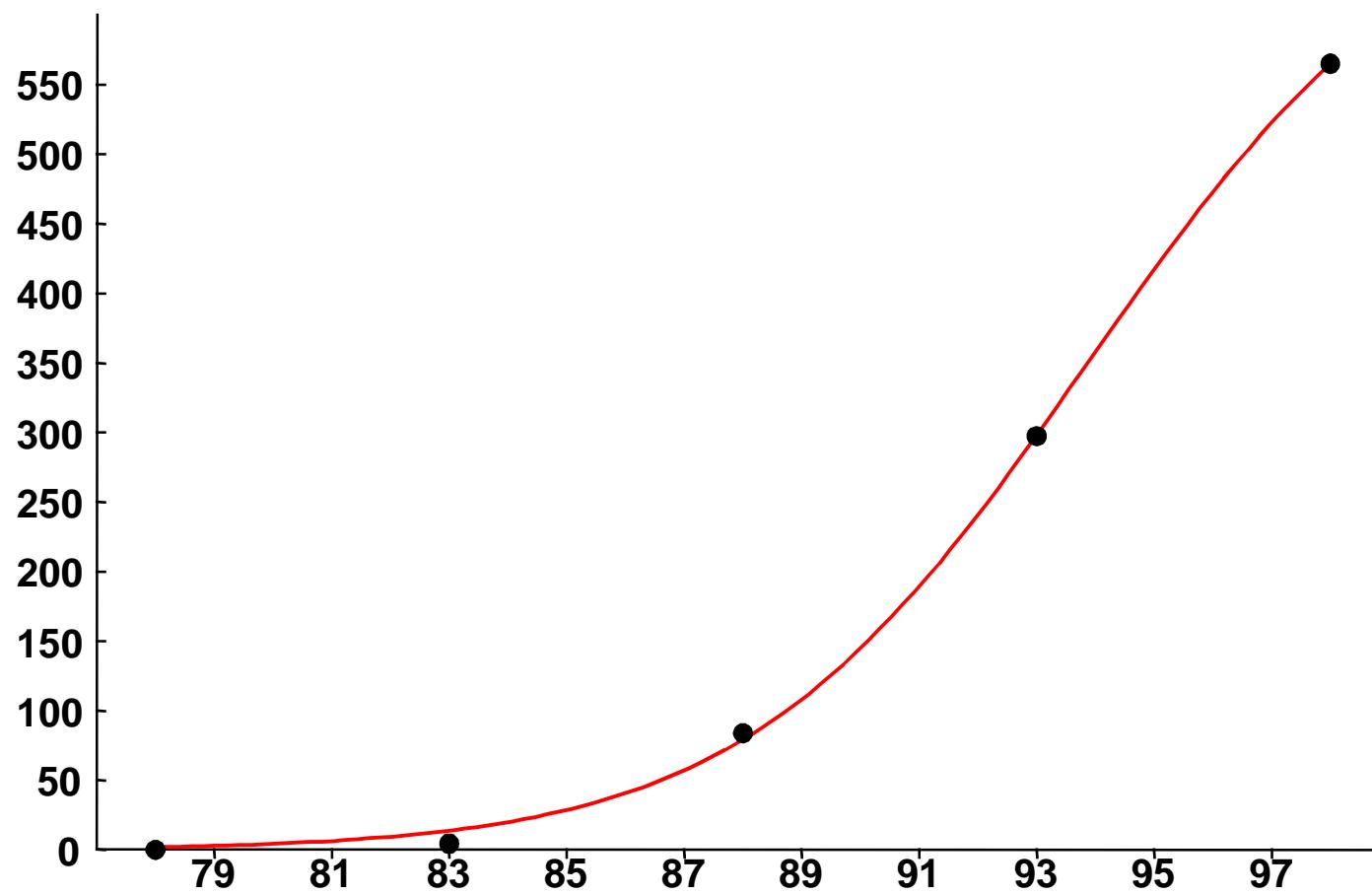
The temporal trend of concentrations of PCBs (ppb wet weight) in egg of herring gull from Lake Ontario, Canada, during 1974-1992. (Tillit et al. 1998)

DRAFT



Annex I – Figure 12

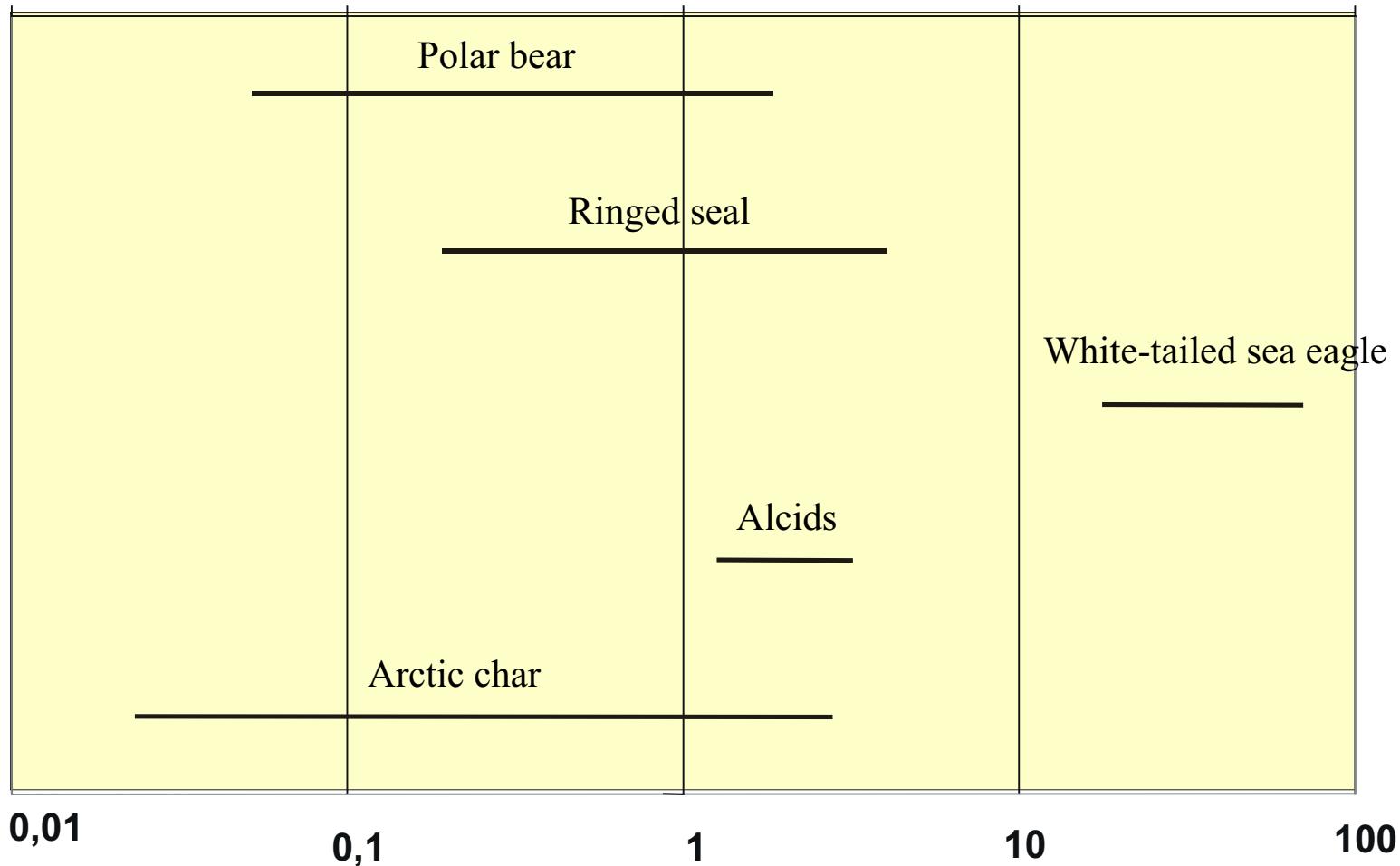
The temporal trend of dioxin concentrations (ppt w.w.) in egg of herring gull from Lake Ontario, Canada, during 1971-1991. (Tillit et al. 1998)



Annex I – Figure 13

The temporal trend of 2,2',4,4'-tetrabromodiphenyl ether levels in lake trout from lake Ontario (Luross et al. 2000)

DDT concentrations

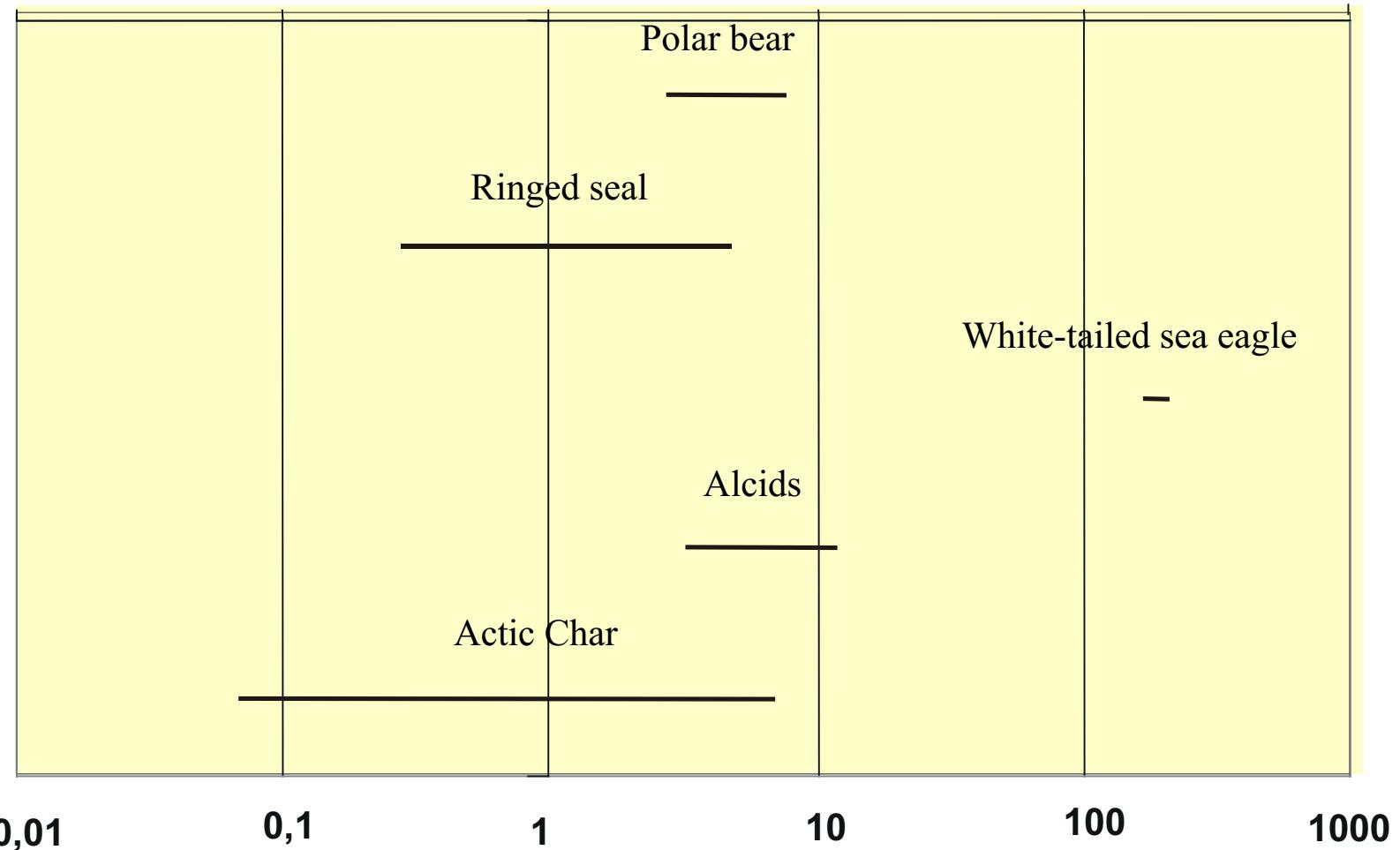


Annex I – Figure 14

The range of DDT concentrations (µg/g lipid weight) in Arctic biota in the 1990s given on a logarithmic scale.

DRAFT

PCB concentrations

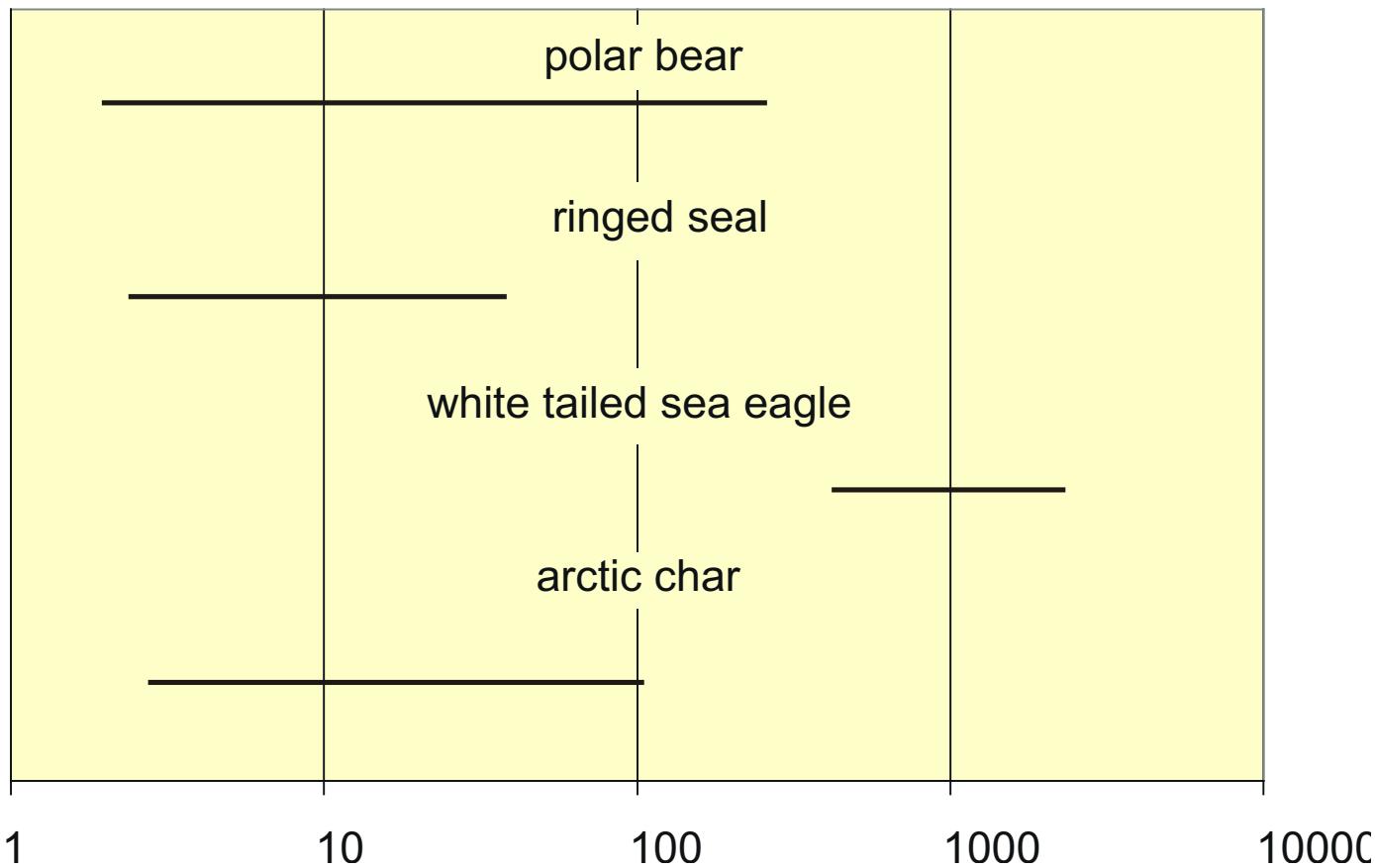


Annex I – Figure 15

The range of PCB concentrations ($\mu\text{g/g}$ lipid weight) in Arctic biota in the 1990s given on a logarithmic scale.

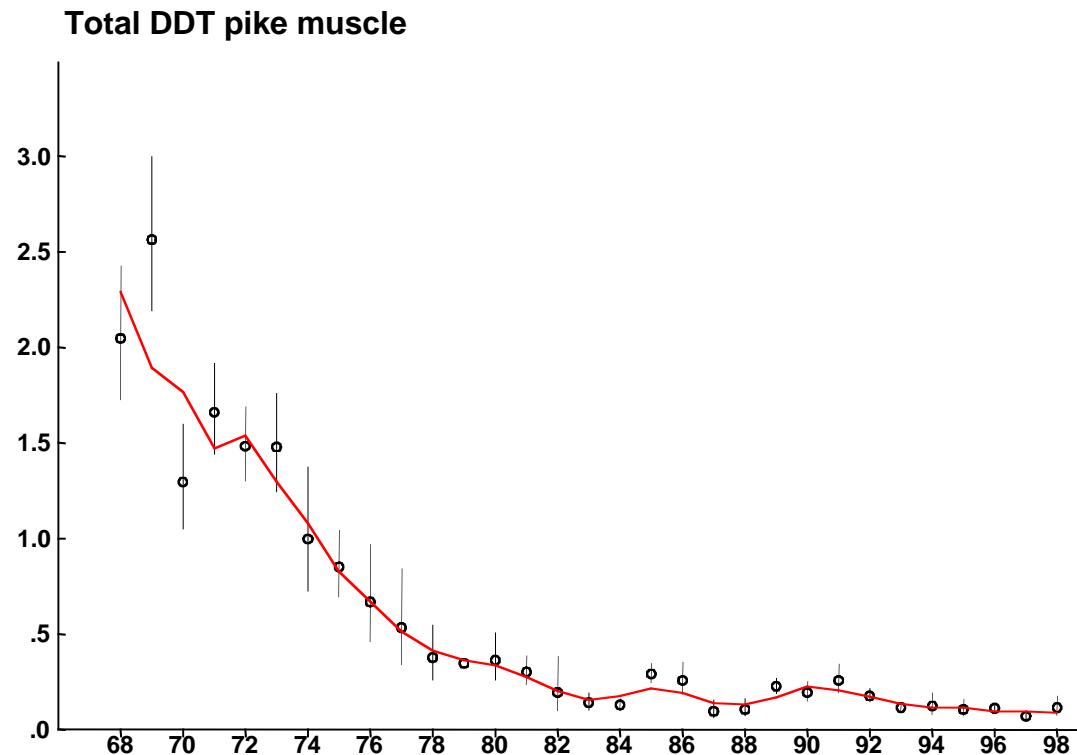
DRAFT

Dioxins in arctic biota in the 1990s



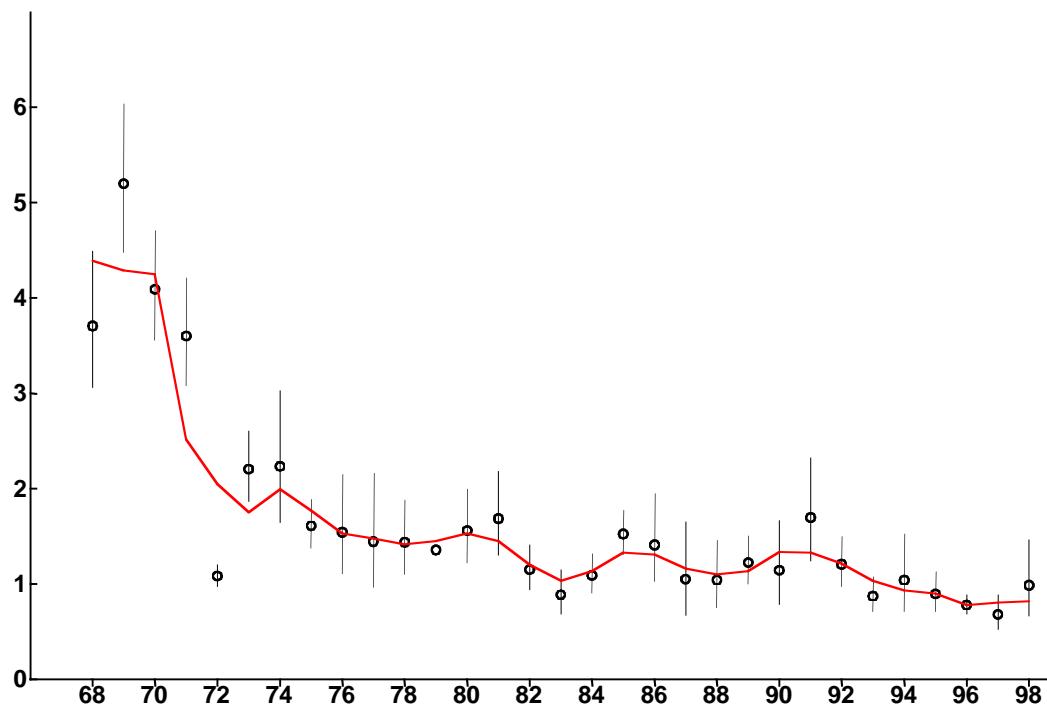
Annex I – Figure 16

The range of PCDDs/PCDFs concentrations (pg/g lipid weight) reported as TCDD toxic equivalents (TEQs) in Arctic biota in the 1990s given on a logarithmic scale.



Annex I - Figure 17

The temporal trend of total DDT in pike muscle ($\mu\text{g/g}$ lipid weight) from Lake Storvindeln in sub-Arctic Sweden during 1968-1998 (Bignert *et. al.* 1998 and data from the Swedish Environmental Monitoring Programme, Swedish EPA). Circles represent geometric means; vertical bars 95% confidence intervals.

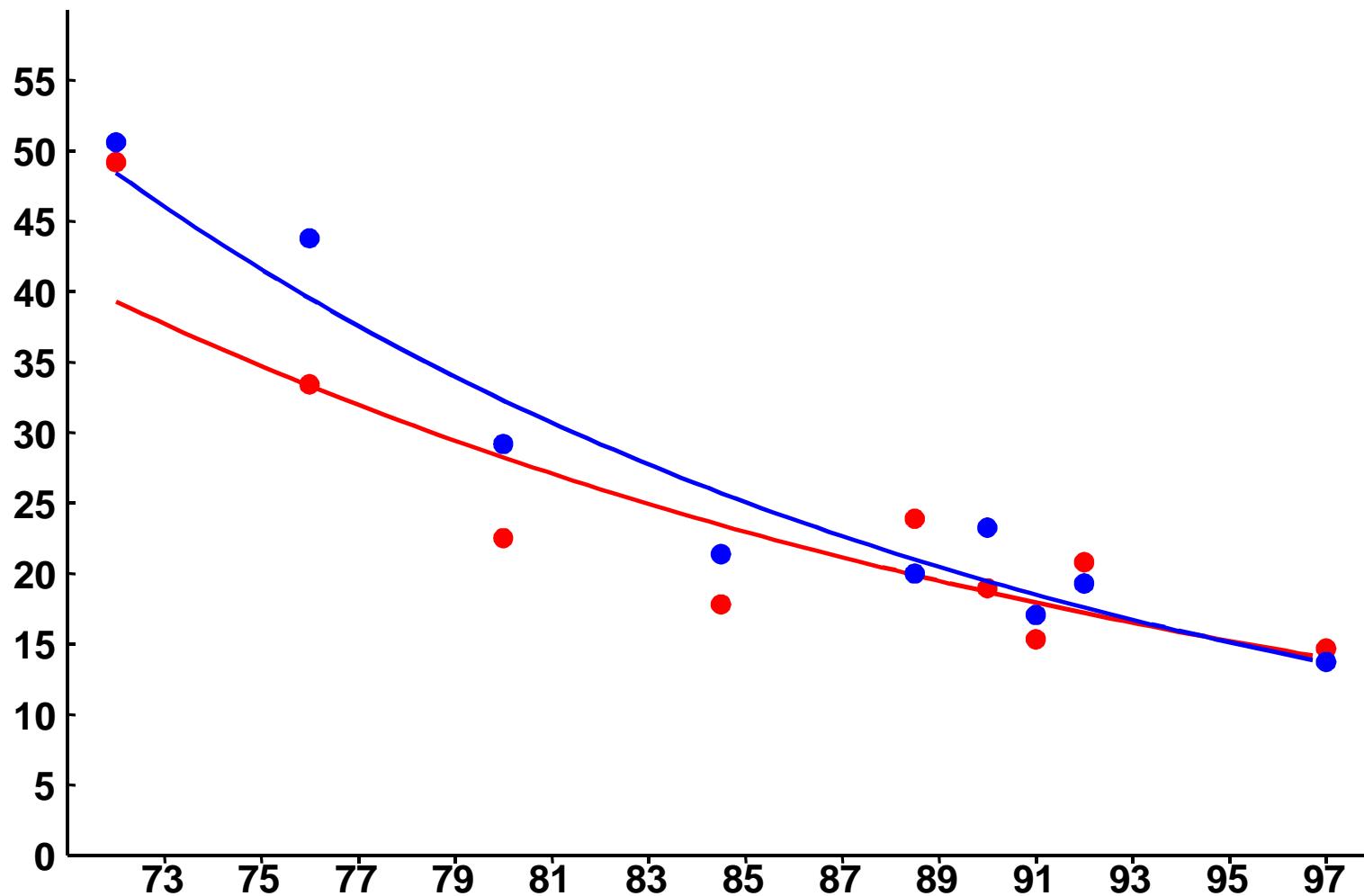
Total PCB pike muscle**Annex I – Figure 18**

The temporal trend of total PCB in pike muscle ($\mu\text{g/g}$ lipid weight) from Lake Storvindeln in sub-Arctic Sweden, during 1968-1998 (Bignert *et. al.* 1998 and data from the Swedish Environmental Monitoring Programme, Swedish EPA). Circles represent geometric means; vertical bars 95% confidence intervals.



Annex I – Figure 19 TEQs and PCBs in fisheaters.

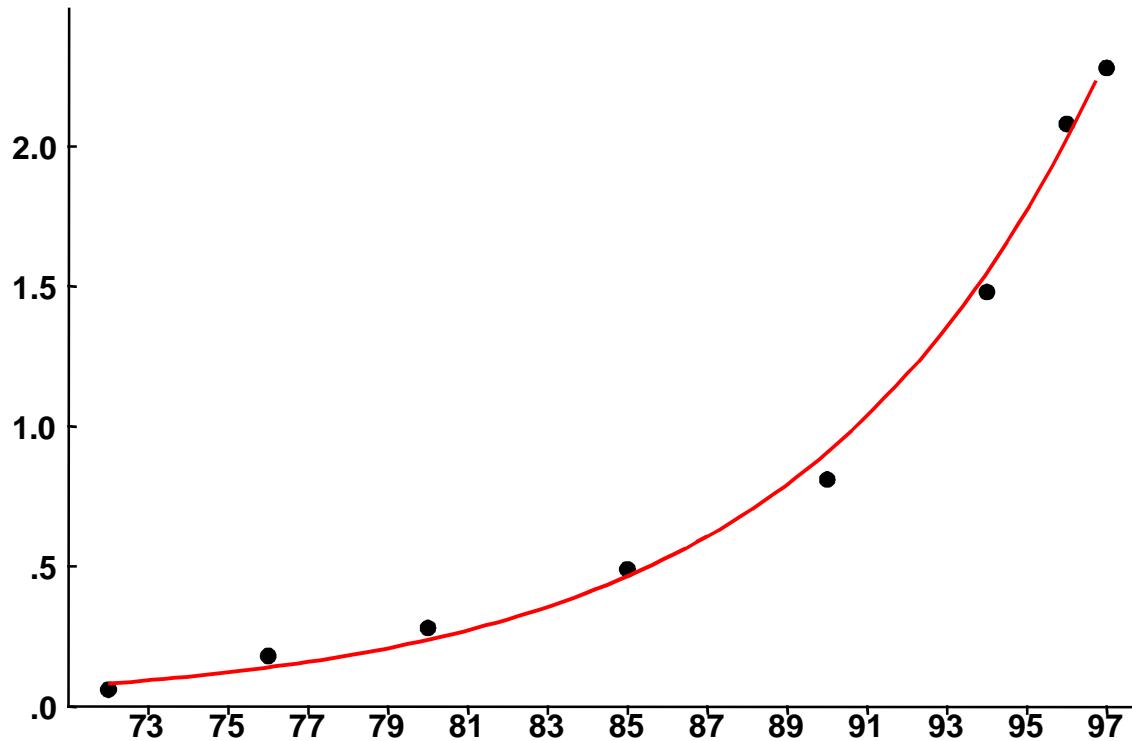
TEQ(PCDDs)=blue bars, TEQ(PCDFs)=red bars, TEQ(non-ortho-PCBs)=green bars, TEQ(mono-ortho-PCBs)=purple bars



Annex I - Figure 20

Time trend of TEQs, pg/g lipid weight, in mothers' milk from Sweden (Norén ref).
Red line = TEQ(PCDD+PCDF), blue line = TEQ(non-ortho-PCB+mono-ortho-PCB)

DRAFT



Annex I – Figure 21

Time trend of 2,2',4,4'-tetrabromodiphenyl ether (BDE-47) concentrations (ng/g l.w.) in Swedish mothers' milk (Meyronyté et al. 1999)